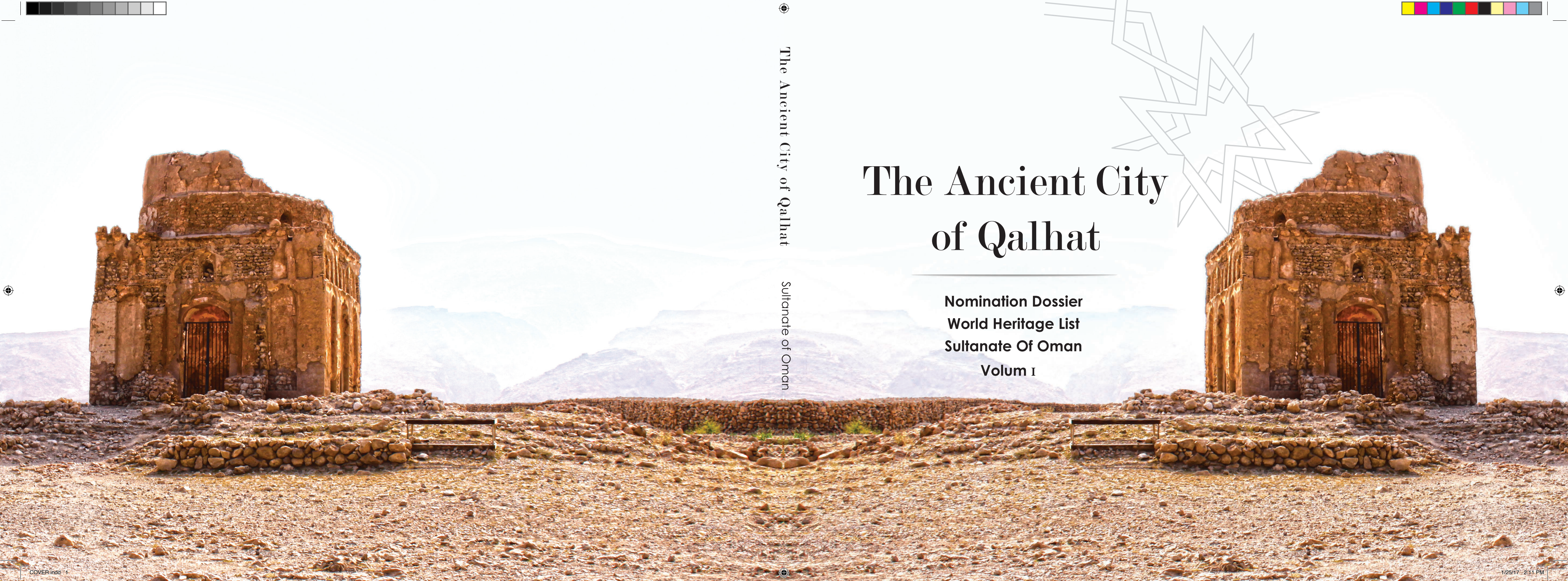




The Ancient City of Qalhat

Sultanate of Oman

The Ancient City of Qalhat

Nomination Dossier
World Heritage List
Sultanate Of Oman
Volum I



QAL



HER



Interior view of Bibi Maryam Mausoleum shows the squinches and moqarnas after consolidation, and the access to crypt bottom © MHC, 2006



Shores of the Ancient City of Qalhat© MHC, 2013

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Ancient City of Qalhat. Friday mosque decoration © MHC



Aerial photo of the Ancient City of Qalhat © MHC, 2010

Executive Summary

State Party

Sultanate of Oman

State, Province or Region

Governorate of Al-Sharqiyya South, Wilayat of Sur

Name of property

Ancient City of Qalhat

Geographical coordinates

UTM ZONE 40 (744200 E, 2512000 N)

Textual Description of the Boundary of the Nominated Property

The Ancient City of Qalhat is limited by the inner and outer city walls as well as the zones outside the walls where the necropolises are situated. It has the shape of an oblong triangle nearly 1600 m long on the side of the sea. It extends on a high sloping ground between the Sea of Oman to the east, the steep edge of the Wadi Hilm to the north-west and the foot of the Jabal Al-Hajir Al-Sharqi to the south-west.

To the north-west, Wadi Hilm (between 80 to 160 m the wide) separates the site from Khur Matmur and the modern residential quarter of Qalhat. On the right bank of the wadi, lay some palm farms, which cover almost an area of 5,500 m². A road crosses both Wadi Hilm and the palm oases reaching the Ancient City of Qalhat.

To the south-west, the site is bordered by Al Hajir Mountains which reach about 200 m high above the sea level. Parallel to this mountain range, the highway leading to Sur is situated 50 m above the sea.

Map of the Nominated Property

See the following pages.

Criteria under which Inscription is proposed

The Ancient City of Qalhat is nominated under criteria (iii), (v) and (vi)

Draft Statement of Outstanding Universal Value

a. Brief Synthesis

The ancient city of Qalhat was an incomparable port city on the sea of Oman, opened to the Arabian Sea and the Indian Ocean, it functioned as a great center of trade between Asia and India in the Islamic era. The historical resources prove that Qalhat was a pivot in the kingdom of Hormuz, in fact it was considered as the second capital after the old and new cities of Hormuz. Since the 11th till the 15th centuries Qalhat under the ruling of the princes of Hormuz played a vital role in the commerce in the region, not only in the exporting of the famous Arab horses from its valleys to as far as India, but also in the exchange of other precious goods like dates, incense and pearls.

As many other cities from the kingdom of Hormuz, Qalhat had its share of Portuguese attacks and earthquakes, leading the city to its fate to be abandoned early 16th century, only to keep its site intact as it was five centuries later. The remains and monuments on site comprehensively represent the kingdom and reflect its legacy, architecture and heritage. Extensive studies and excavations are expected to reveal more about this great kingdom.

b. Justification for Criteria under which Inscription is proposed

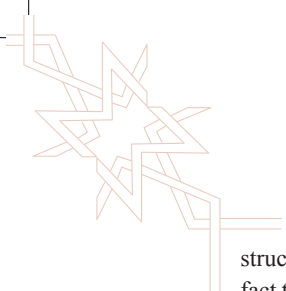
The Ancient City of Qalhat is nominated under Criteria (iii), (v) and (vi).

Criterion (iii): Bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared

The Ancient City of Qalhat presents a unique testimony to the great Kingdom of Hormuz, which prospered from the 11th to 16th AD century. Qalhat has played a significant role in the development of the Kingdom of Hormuz. The archaeological site of Qalhat is by no doubt the most significant and complete physical representation of the kingdom of Hormuz. Almost all city's components can be read on site from houses, to streets and square, as well as the Friday mosque, the *hammam* and the only standing still building of Bibi Maryam mausoleum. The fact that Qalhat has been totally abandoned and that no modern settlement has disturbed the site makes this property of great value for archaeological research on the kingdom of Hormuz and it will allow understanding more about the ways of life in a medieval Arabian port city.

Criterion (v): An outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change

The Ancient City of Qalhat is an outstanding example of traditional town development and building techniques created to answer the constraints of the local environment. Qalhat is an extraordinary reflection of a traditional human settlement in a medieval Islamic port city with a prominent position in the maritime trade routes reaching as far as India, China and the Far East. The town planning shows different quarters, sometimes fortified, defined by their use (religious, economic, etc.). The materials used for con-



struction were the traditional locally available coral. The fact that site is intact since its abandonment makes it a fine presentation of the kingdom of Hormuz in all its social, cultural and commercial aspects.

Criterion (vi): Directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance

Since the Pre-Islamic period and until the Middle Age, the Ancient City of Qalhat was directly associated with great events and traditions of outstanding universal significance, such as (1) the development of structural and decorative elements of the Islamic architecture, (2) the development of a corpus of tales and beliefs, which even if not fully proven by the archaeological and historical data, contributed greatly to the creation of a specific local culture, and (3) the descriptions in the major historical travelogues of the city and its commercial importance in the kingdom of Hormuz and of the lifestyle of its inhabitants, which can be authenticated though detailed comparisons with the available archaeological data.

c. Statement of Integrity

The Ancient City of Qalhat covers all chosen attributes corresponding to the above defined criteria. The ruins of site are completely preserved under the rubble caused by the destruction of an earthquake and by the Portuguese attack in the 16th AD century . The site has never re-used, therefore it was not affected by any infrastructural modification or development. The results of the geophysical survey confirmed the existence of more than 2800 houses under the ruins, organized in quarters. The city includes important elements corresponding to an upmost important Islamic town such as the Friday Mosque, which could have been certainly seen from far away on the sea, the Bibi Maryam mausoleum as an outstanding example of funerary architecture, the *hammam* near the entrance of the town and many entrapped buildings showing the importance of this port. The array of finds, including wares

from as far away as China or Southeast Asia, confirm the international importance of this city in the Islamic Middle Ages. The materials used for the constructions were entirely local, showing a great dexterity in applying regional materials also for the construction of mighty monuments. The entire Ancient City of Qalhat is an archaeological site under the protection of the Government of Oman, which safeguards the site from any development pressure. The Qalhat Development Project, which started in October 2012 and will end in 2017, ensures a development process including excavation, conservation and a tourism development plan for the site. The application of the final draft management plan will ensure that the integrity of the site is maintained.

d. Statement of Authenticity

Once again, the abandonment of the Ancient city of Qalhat plays a positive role in the conservation of its authenticity. The site has never been occupied and no later re-use ever took place, therefore it preserves all characteristics of organization, function and particular architectural techniques corresponding to the Islamic Period in general and the period of the Hormuz Kingdom in particular. The “frozen” spatial organization of the Ancient City of Qalhat offers the best relicts of the social and economic urban planning in the early medieval cities on the Arabian Sea. The use of traditional building materials and, coral stones in particular, ensure the authenticity of all its structures, these traditional materials are still used for the conservation of the excavated buildings in Qalhat. The location of the Ancient City of Qalhat between the mountains, deep valleys and the sea is untouched by modern constructions.

e. Protection and Management Requirements

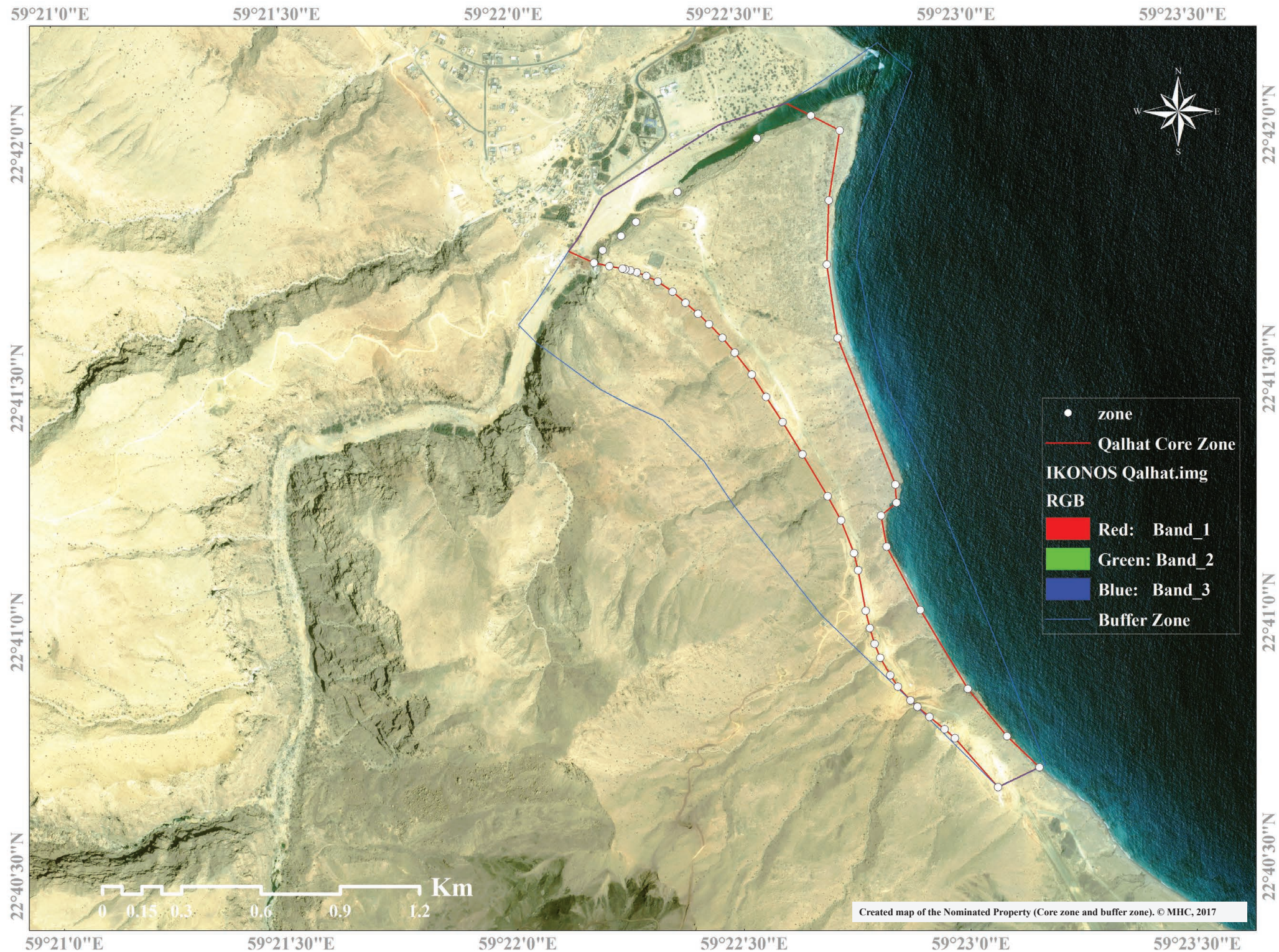
The administrative organization responsible for the protection and management is the Ministry of Heritage and Culture. The management of the site is organized as follows: according to the Statute of the State (The Constitution), and the mandate approved by the Royal decree of the

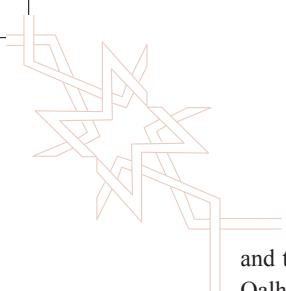
Ministry of Heritage and Culture, the Ministry remains as the main official body responsible for the protection, management and safeguard of this site. The Directorate General of Archaeology as a part of the Ministry’s Administrative structure looks after the day to day management of the site through the mandate of its four main departments and with the support of other departments:

- Department of Archaeological Excavations & Studies.
- Department of Restorations & Maintenance.
- Department of World Heritage Sites
- Department of Underwater Archaeology

The protection and management of the site is implemented under the laws and regulations of the government of Oman in respect to the UNESCO Convention concerning the protection of world cultural and natural heritage adopted on 16th of November 1972¹. The current framework regarding the protection of the property is the National Heritage Protection Law promulgated by Royal Decree No. 6/80 (See Annex 1&2). The Ministry of Heritage and Culture ensures its commitments to all the mechanisms specified by the said law to implement the required protection measures for the Ancient City of Qalhat. The Qalhat Development Project, which started in October 2012 and will end in 2017, ensures a development process including excavation, conservation and a tourism development plan for the site. The application of the Final Draft Management Plan will ensure the protection and long-term development of the site. The State Treasury will ensure all the required financial and qualified human resources in order to ensure the necessary requirements for protecting and administrating the Ancient city of Qalhat in a sustainable way, in addition to monitoring the site, as well as including systems of prevention against natural threats. The first and most urgent measure is the preparation of a management system including an ambitious final draft management plan for the Ancient City of Qalhat in collaboration with *The World Monument Fund* in which the protective measures

¹ <http://whc.unesco.org/en/conventiontext/>





and the management mechanisms for the Ancient City of Qalhat will be clearly identified. The Final Draft Management Plan will also ensure that risks and vulnerabilities in buildings which were excavated.

Name and contact information of Official Local Institution / Agency Organization

Ministry of Heritage and Culture, Sultanate of Oman

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Al Wizarat Street, Al Khwair North

Muscat

Sultanate of Oman

PO. Box: 668, Muscat. PC.100

Phone: + 968 24641357 / + 968 24641442

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Website: www.mhc.gov.om





Interior view of Bibi Maryam Mausoleum showing the squinches and moqarnas © MHC, 2004



Ancient City of Qalhat. Detail of the Bibi Maryam Mausoleum © MHC, 2013

Section 1

Identification of the Property

1.a. State Party and Country:

Sultanate of Oman

1.b. Region:

Governorate of Al-Sharqiyya South, Wilayat of Sur

1.c. Name of the Property:

The Ancient City of Qalhat

1.d. Geographical Coordinates to the Nearest Second:

The center of the Nominated Property is at:

Latitude: 22° 41.856'

Longitude: 59° 22.627'

UTM ZONE 40, 744200 E, 2512000 N

1.e. Maps and Plans Showing the Boundaries of the Nominated Property

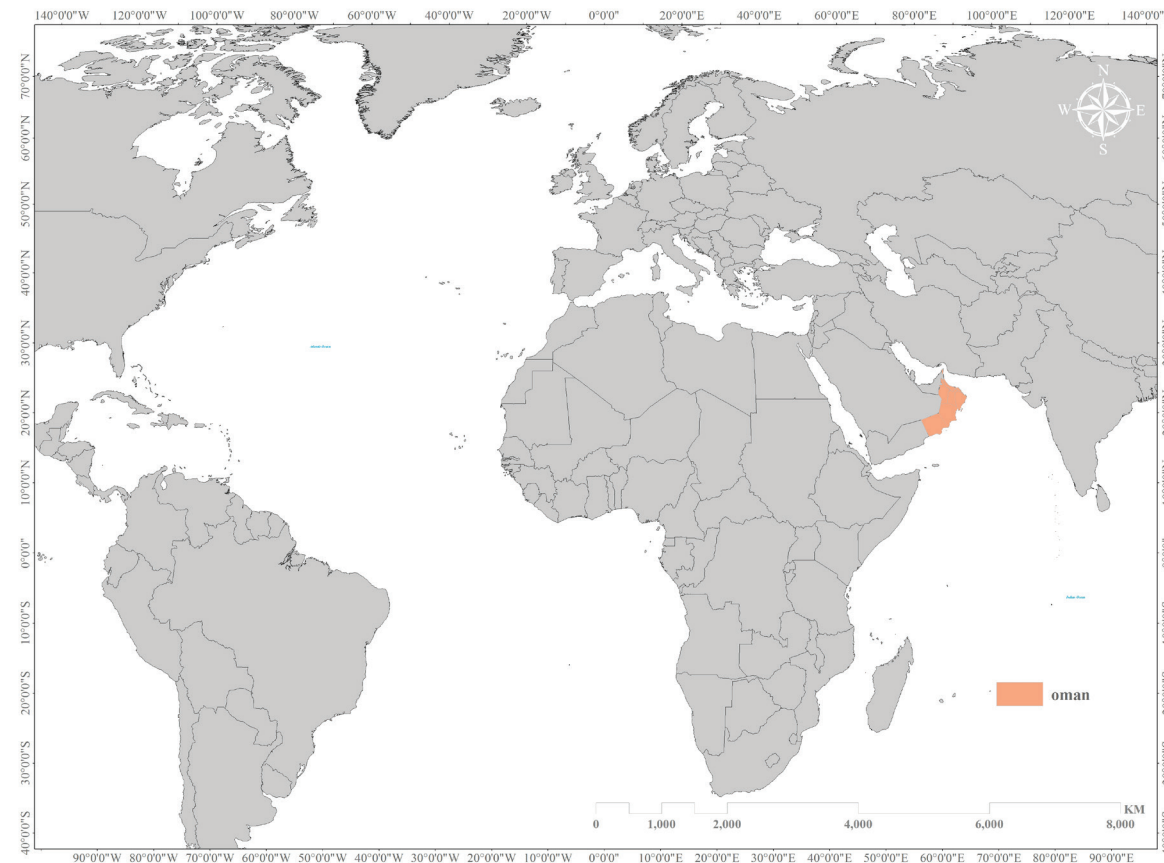
In the following pages, reduced maps and satellite images are presented to precisely locate the Ancient City of Qalhat.

1.f. Area of Nominated Property and Buffer Zone

Area of property: 1018929 m²

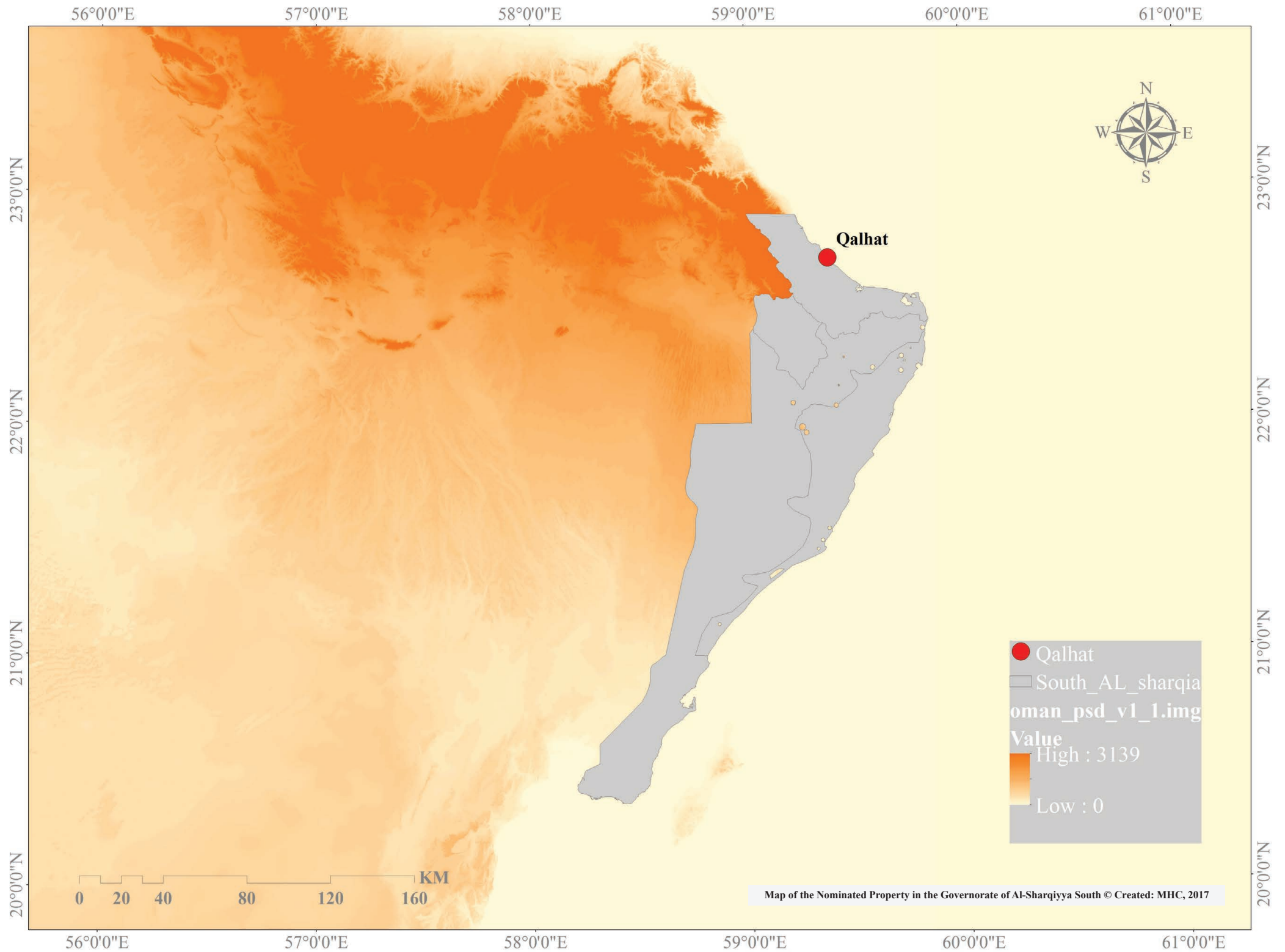
Area of buffer zone: 1092225.06 m²

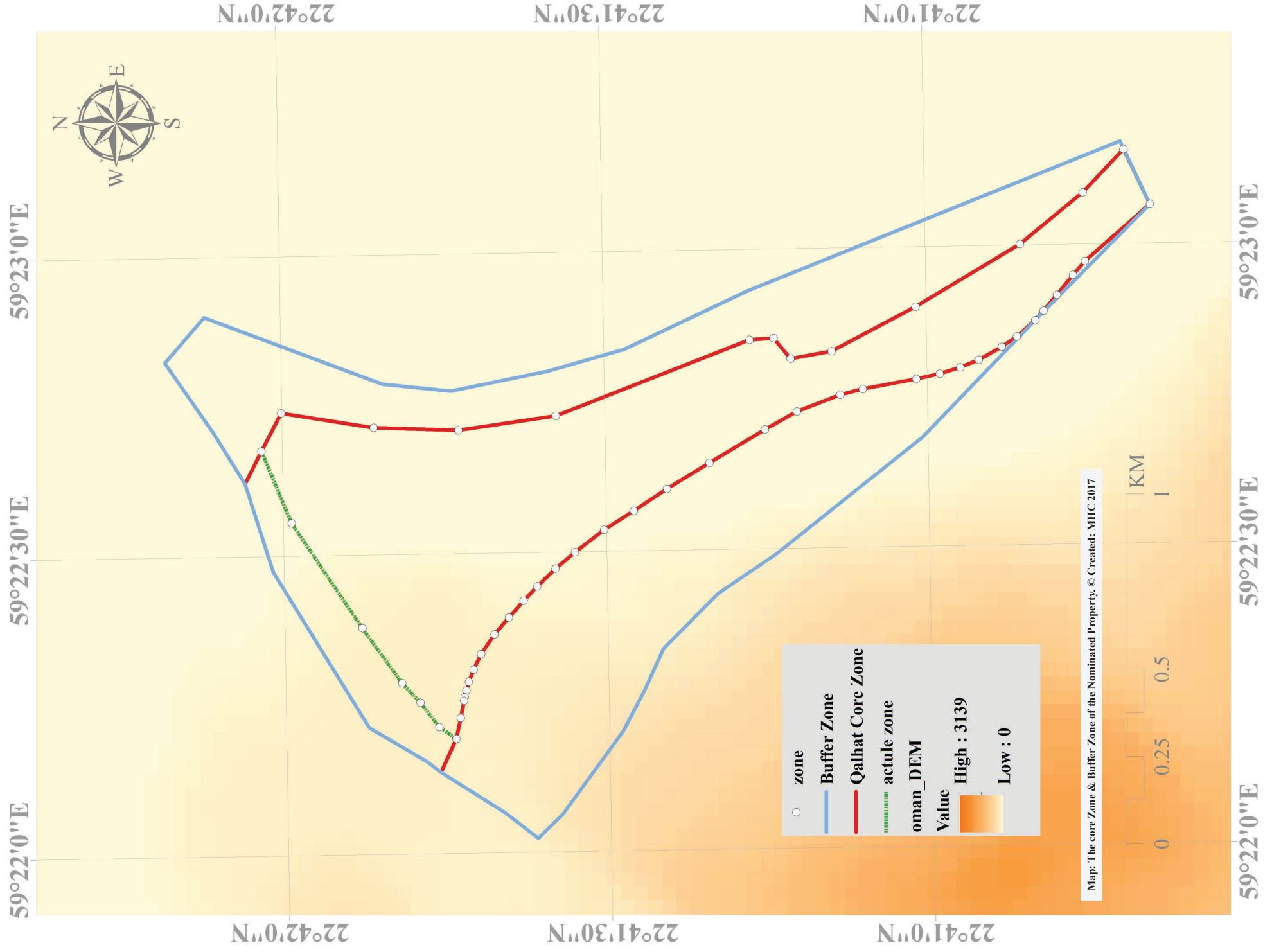
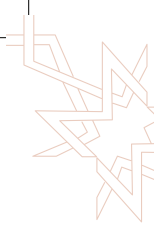
Total area: 2111154.06821 m²

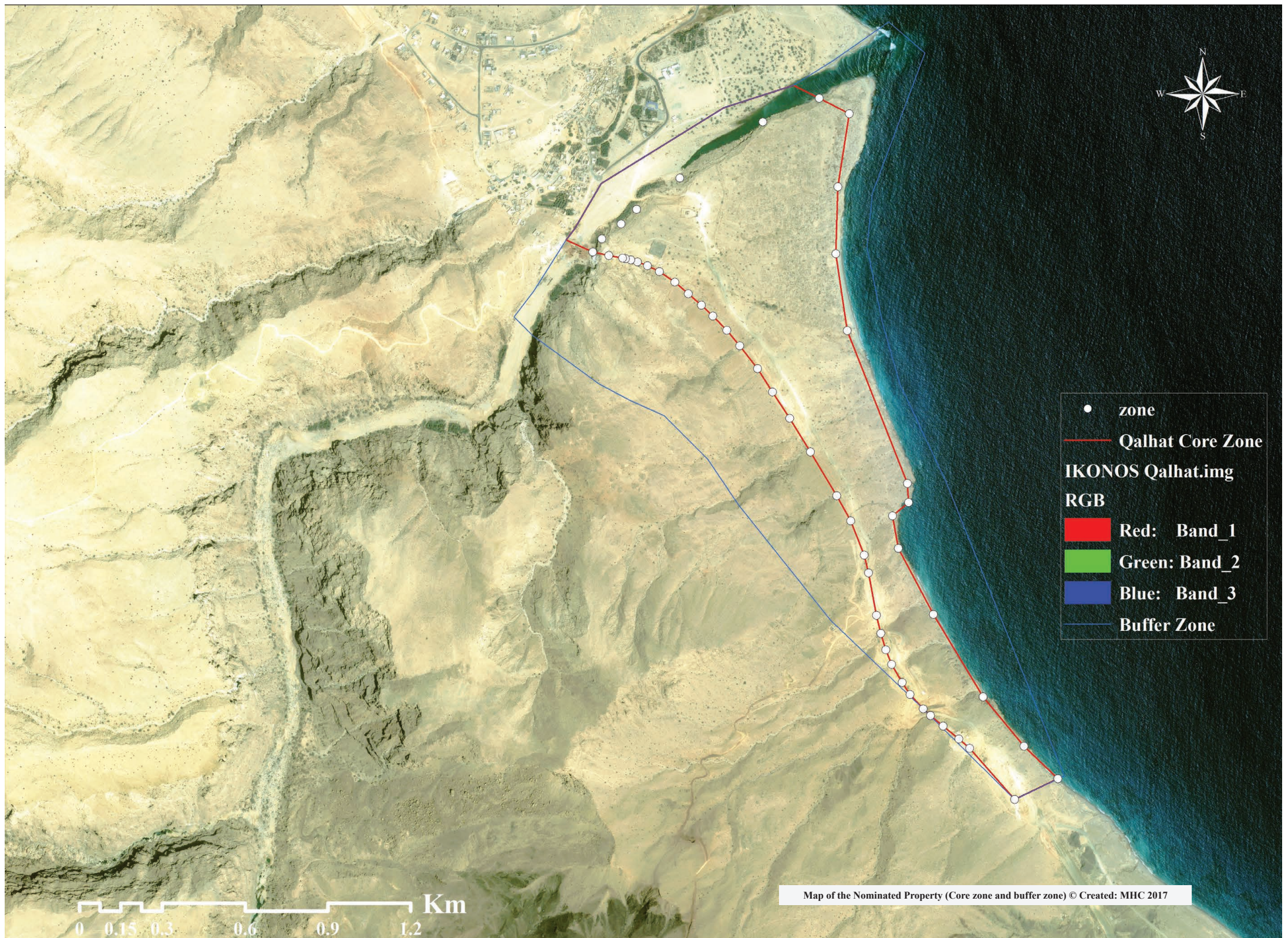


Global map showing the location of the Sultanate of Oman © MHC, 2017











Bibi Maryam Mausoleum standing alone among the ruins of Qalhat © MHC, 2014

Section 2

Description

2.a. Description of the Property

One of the most impressive archaeological sites of Oman, Qalhat was a key harbor in southern Arabia during the Middle Ages, in the 5th - 7th AH/ 13th -15th AD centuries. During this period, it was the twin city of Hormuz, a second capital, but was abandoned in the beginning of the 16th AD century and never reoccupied. The site has been studied in 2003 and continuously since 2007¹. Qalhat was open to the outside world by the sea of Oman, the Arabian Sea, the Indian Ocean and the Arabian Gulf. Through the high mountain paths, it was connected to the regions of the Ja'alan, North Al-Sharqiyya and Dakhiliyah.

The nominated property includes the whole of the Ancient City of Qalhat, a huge area of ruins of about 35 ha, limited by the inner and outer city walls as well as the zones outside the walls where the necropolises are situated. The site is located on the coast of Al-Sharqiyya province, 45 km north-west of Ras Al-Hadd, near the city of Sur². It's situated on a narrow triangular rocky plateau, nearly 1600 m long, at the foot of the Jabal Al-Hajir Al-Sharqi. It is surrounded by the Sea of Oman to the east, the mountain to the southwest and the high bank of the Wadi Hilm to the northwest offering a perfect natural protection³. The plateau is slightly sloping down from the foot of the mountain (at level c. 40 m), ending on the sea-side with a steep and inaccessible cliff 10 m to 15 m high, beaten by the waves

¹ Rougeulle, 2010: 303.

² Rougeulle, 2007: 1.

³ Rougeulle, 2015: 16.



at high tide⁴.

The buffer zone of the property includes the crests of the Jabal Al-Hajir Al-Sharqi to the west, following a steep wadi to the south and following the coast-line 200 m in the sea. The north-eastern limit goes follows the Wadi Hilm on its left bank, including part of the village in the Wadi and following the property lines towards the beach and into the sea on the north.

2.a.1. Context

The Southern Quarter of the City

The southern quarter of the city is located between the valley intra-muros and the southern city rampart. It has not been excavated yet⁵. This large triangular surface is scarcely built. It is crossed by several wadies. It may have served as an entrapped for bulk or as a natural station for the Arabian horses which were the main export from Qalhat during the 5th-6th AH/13th-14th AD century about horse trade at Qalhat⁶. Thousands of thoroughbred Arabian horses were sold every year at very high prices to the Indian maharajas for their cavalry. “*They also export many good Arab horses from this to India. For, as I have told you before, the number of horses exported from this and the other cities to India yearly is something astonishing*”⁷. They originated from all parts of eastern Arabia but many of them were shipped at Qalhat, as ‘they cannot approach elsewhere’ as noted 923 AH/1517 AD by a Florentine traveler⁸.

*The South-Eastern Quarter of the City (Quarter QSE, previously QE)*⁹

The most ancient quarter of the city is located near the coast in the south-eastern part of the walled area. It is bounded on the south by a valley which runs through an

underground rocky layer where a water reservoir was built at the mouth of the valley. To the north of this quarter lies another deep valley (wadi). The seafront is composed of a shore, which is the only place where disembarkation was possible. This quarter was known as the harbor quarter, since a number of anchors were found underwater nearby during the 2003 archeological survey campaign¹⁰ (See Annex 4). The south-east quarter covers a small area but it’s very densely built, with clusters of small structures served by narrow streets. The main street comes from the west, rather straight from the Bibi Maryam Mausoleum.

also visible. This quarter was established around the Great Friday Mosque (B12) of Qalhat whose original construction dates back to the establishment of the city in the 11th AD century or even probably before.

*The South-Western Quarter (QSW, previously QG)*¹¹

West of the main quarter of the city, this quarter was the graveyard of Qalhat (Vosmer 2004, C3). This place, which was allocated for the burial of the dead, is covered with many graves. The ruins of some small mausoleums are still visible. There are also a number of large buildings, likely houses, in addition to other massive buildings,



Ancient City of Qalhat. Aerial view of the site © MHC, 2013

Many north- south streets and some secondary lanes are

⁴ Rougeulle, 2015: 16.

⁵ Rougeulle, 2015: 32.

⁶ Bhacker, 2004: 39-41.

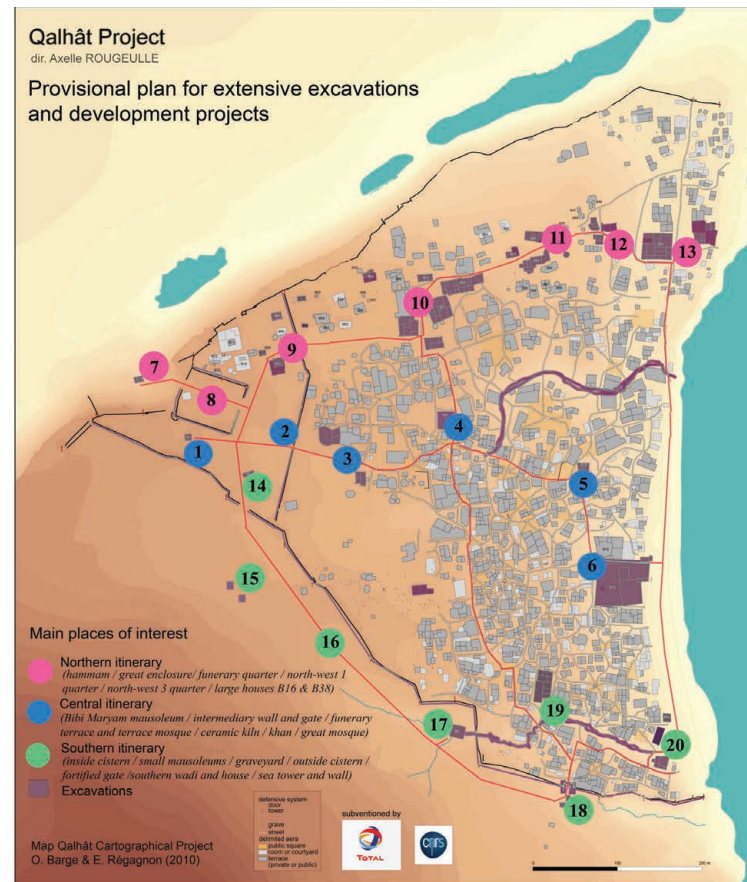
⁷ Yule-Cordier, 1920: book 3, chapter 39.

⁸ Corsal, 1830: 365-366.

⁹ Rougeulle and Anselm, 2008/1: 4-6.

¹⁰ (Vosmer 2004, 399-401)

¹¹ Rougeulle and Anselm, 2008/1: 7.



Central itinerary

- 1 - Bibi Maryam mausoleum (B1)
- 2 - Intermediary fortification wall (B6) and main western gate (B31)
- 3 - Funerary terrace (B30) and small mosque (B29)
- 4 - Ceramic factory (B41)
- 5 - Khan ? (B14 Iranian excavations)
- 6 - Great Mosque

Northern itinerary

- 7 - Hammâm (B4)
- 8 - Great enclosure (B3)
- 9 - Northern graveyard

- 10 - North-western quarter (small mosque B19, houses B20, B21, B94)
- 11 - Small mosque (B28)
- 12 - Small mosque (B38)
- 13 - Large houses (B16, B38)

Southern itinerary

- 14 - Intra-muros cistern (B2)
- 15 - Small mausoleums
- 16 - Western graveyard
- 17 - Extra-muros cistern (B9)
- 18 - Main southern gate (B8)
- 19 - Southern wâdi
- 20 - Sea tower (B24)

which are located south of the main street leading from the

Bibi Maryam mausoleum to the Great Mosque.

The Western Quarter (QW, previously QA) ¹²

This quarter is separated from the rest of the city by an intermediary fortification wall. This area is considered as an exceptional and specific quarter in the urbanism of Qalhât. This quarter was only slightly occupied, but it includes important buildings such as the mausoleum of Bibi Maryam and a large arched water cistern. A later rectangular enclosure with towers destroyed the northern fortification wall and the enclosure of the Bibi Maryam. There is also a pottery atelier (B41) with three successive ceramic kilns.

The North-Western Quarter (QNW, previously QB) ¹³

This quarter of the city of Qalhât lies in the northern and north-western part of the city, north of the ancient wadi bed which marks the northern limit of QSE. It is composed of groups of buildings of different sizes and functions separated by empty spaces. For example, the first group (QNW1) is made up of a central square surrounded by several buildings of 600 m² each, which could be big houses. The smaller structure B19 proved to be a small mosque associated with these houses.

The North-Eastern Quarter (QNE, previously QD) ¹⁴

The north-east quarter is better documented and well-defined topographically. It's located between the shore, here a rocky cliff about 13 meters high, and a marked ridge in the bedrock, about six meters higher and parallel to the shore. It is mainly composed of large buildings, up to 1000 m², on both sides of a quasi-straight street running from the site of the Great Mosque and the main quarter QSE to the northern part of the city. This area was directly connected to the harbor and the buildings involved with the maritime trade. Larger buildings are located to the west of the street opposite to a rectangular field. It is an evident

¹² Rougeulle and Anselm, 2008/1: 7-8; Rougeulle, 2015: 33-34.

¹³ Rougeulle and Anselm, 2008/1: 7; Rougeulle, 2015: 32-33.

¹⁴ Rougeulle and Anselm, 2008/1: 6-7; Rougeulle, 2015: 32.

that the north-east quarter was partially eroded because part of the rocky slope has fallen into the sea. In one of the buildings of this quarter, a stratigraphic sounding 1.5 m deep was opened and many ceramic sherds were identified dating back to the 11th AD century . Therefore, it is most likely that the establishment of this quarter, like quarter QSE, was also settled quite early in the history of Qalhat.

The Northern Quarter (QN, previously QC) ¹⁵

The northern quarter of the Ancient City of Qalhat lies along the northern side of an invulnerable wall of fortification opposite to Wadi Hilm. This quarter was already identified as the center of crafts and industry of the city. An abundant number of iron and copper remains were discovered in this quarter confirming its role.

The Funerary Quarter ¹⁶

Qalhat was bordered on its west, northwest and southwest sides by a wide funerary quarter which extends outside the walls. More than 2000 funerary structures were discovered, which can be grouped in nine graveyards (mausoleums, small platform mosques, funerary terraces, graves, etc.). The funerary terraces¹⁷, in the funerary areas, were the most characteristic features of the medieval city. These structures are raised surfaces, covered with small pebbles and/ or gravels and most often with a whitish color, lined with stone blocks.

2.b. History and Development

2.b.1. Prehistoric Qalhat

Although no prehistoric finds have been made on the site of Qalhat itself, beehive tomb clusters dating back to the third millennium BC were found along the mountain road from Qalhat to Qabdah. Some remains of tombs dating back to the first millennium BC were observed on the mountain overlooking the Ancient city of Qalhat. In 2003, an ancient cemetery in the Ancient City of Qalhat based

¹⁵ Rougeulle and Anselm, 2008/1: 6.

¹⁶ Rougeulle, 2015: 32.

¹⁷ Rougeulle, 2012: 3-14.



Ancient City of Qalhat. Aerial view of the funerary quarter © MHC, 2017



Ancient City of Qalhat. Bibi Maryam Mausoleum with a view on the sea © MHC, 2013

AH/967 AD²⁰.

This semi-legendary tradition reflects a long trail of 'Azdi migrations from western Arabia to Oman and Iran, starting well before the Christian Era until the Islamic period²¹. Since no trace of pre-Islamic occupation was found until now in Qalhat, one can doubt that the foundation of Qalhat was so early. And the rare erratic Abbasid sherds (4th AH/10th AD) found on the site are meek proof for an early Islamic period occupation.

2.b.2. The Islamic Foundation (5th AH/11th AD – 6th AH/12th AD)

At the time Al-'Awtabi wrote the Ansab, Qalhat was certainly a settlement important enough to be cited as an important center. Several other literary sources mention the existence of Qalhat in the same period. In the Shahnameh, the prince of Hormuz, Turan-shah records a very similar story to the pre-Islamic tradition²². According to Pedro Teixeira, the Hormuzi dynasty was founded by Dirhem Ko the king of an Arab tribe who migrated from Yemen to Iran with his followers in a journey seeking conquest. He decided to take Qalhat which was later named as the Peninsula Port. Mohammad Dirham Ko Al-Azdi made it as his shelter. By the 10th AD century, Mohammad Dirham Ko Al-Azdi established the kingdom of Hormuz in Minab. He made the ancient city of Hormuz as its capital. As a result, Qalhat Ancient City had civil, military, political and commercial connections with the newly-established Arab kingdom of Hormuz. In the early 12th AD century, the kingdom of Hormuz transferred to Jaron Island and it was called the New Hormuz. It was crowned, alongside with Qalhat Ancient City, as the two capitals of the Arab kingdom of Hormuz which created a very powerful empire during the (13th – 15th AD) centuries. The empire imposed

²⁰ For details and references about the pre-Islamic Azdi tradition, as on many other literary sources on Qalhat, see Bhacker and Bhacker, 2004.

²¹ Ulrich, 2008.

²² The *Shahnameh* is now known only by two summaries (most famous in Spanish, written by the traveler Pedro Teixeira in 1595 and the other in Portuguese by a Dominican monk, around 1575).

its domination on seafaring trade between east Africa and India. Under the reign of the Arab kingdom of Hormuz, Qalhat was called Dar Al-Fath (Land of Conquest). At times of conflicts between the ruling dynasties and other powers, Qalhat Ancient City was the shelter for the fleets of the Kings and princes of Hormuz with their families. According to the traveler Marco Polo, when the conflict intensified between the King of Hormuz and the King of Kerman, and the first refuses to pay him *jizya* (tribute), then he would attack him. Accordingly, the king of Hormuz would move to Qalhat to make it as his center. There, he would be able to prevent ships from entering or sailing towards Kerman. Thus, trade would be stopped, and the King of Kerman would not collect its charges as a result he would suffer a financial loss then he had no choice but to settle his dispute with the king of Hormuz). Also, In Qalhat Ancient City all the exiled who were aspiring to power formed their governments, established their armies and constructed their fleets and ships in order to attack the New City of Hormuz. Among the most significant Hormuz rulers who reigned Qalhat Ancient City were Mahmoud bin Ahmad Al-Koushi Al-Qalhati, Bahauddin Ayez and Bibi Maryam.

After Al-Awtabi, literary sources on Qalhat in the 6th AH / 12th AD century become scarce. In Al-Idrisi's Kitab Nu-zhat Al-mushtaq fiikhtiraq Al-Afaq, published around 555 AH / 1160 AD, Sur and Qalhat are described as two cities of Oman on the shore of the sea between Hadramawt and Muscat, small but wealthy with some pearl fishing activity. This is more or less the time when the Saljuqs of Kirman (Iran) invaded Oman, which they will take from the hands of the Buwahids and keep under their control for a century or so, from 455 AH / 1063 AD until 563 AH / 1167 AD.

The archaeological excavations show that the earliest levels, on the bedrock, may be dated to around 495 AH / 1100 AD since they are associated with glazed ceramic assemblages including mainly Iranian sgraffito, a typical ware with a hatched, incised or champlévé decoration under a monochrome or a polychrome glaze. The oldest part of the

town shows deposits of sandy or clay layers with many pebbles, some ceramics, charcoal, bones and shells, but not a single trace of a construction, wall or floor²³.

2.b.3. *The growth of the Ancient city of Qalhat (7th AH/13th AD century)*

Following the decline of the previous pre-Islamic and early Islamic Omani emporium of Sohar on Al-Batinah coast²⁴ and the rise of the Hormuzi kingdom in the 7th AH / 13th AD century, Qalhat gains in fame. Many other regions belonged to Hormuz, the most important of which were Qatif and Al-Ahsa, the islands of Bahrain, Qays, Qishm and Kharg as well as the cities of Qurayat, Muscat, Sohar, Galfar, Minab, Seraph and Bandar Riq. Mentions of the Ancient city of Qalhat increase in literary sources. The history of The Ayyubids and early Rasulids in the Yemen, written by the Yemeni historian Ibn Hatim around 700 AH / 1300 AD, explains that a naval expedition sent in 602 AH / 1205 AD against pirates by the Atabak Sunqur, regent of the Ayyubids in Yemen, reached Qalhat²⁵. According to Ibn al-Mujawir, the port 'together with all the regions of Oman' felt around 612 AH / 1215 AD under the control of the Khwarizm ruler Khwajah Radi Al-Din Qiyam Al-Mulk Abu Bakr Al-Zuzani, who collected taxes and traded in Qalhat until he died in 615 AH / 1218-19 AD, leaving in the city 64000 tonnes of silk²⁶ and 500 horses²⁷. In c.616 AH / 1219 AD a fortification wall was built and after that Qalhat flourished, 'ships from all direction, through every inlet, came. It became a great and respected town'²⁸. Visiting the city around 628 AH / 1230 AD, Ibn Al-Mujawir even produced a sketch map of these fortifications. Surface surveys and excavations of 2008-2011 confirmed the configuration and dating of the walls. Qalhat probably shared strong links with Hormuz since its very beginnings,

23 Rougeulle, 2010: 308-310.

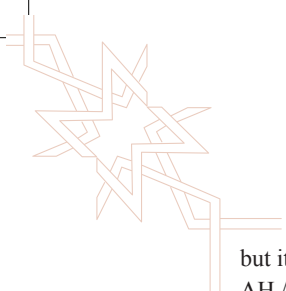
24 Kervran, 2004: 343.

25 Ibn Hatim, 1978:131

26 Unit of weight equal to about 800 to 1000 grams, Vallet 2010: 449.

27 Smith, 2008:277 278.

28 Smith, 2008: 270, 278.



but it was clearly a part of the Hormuzi kingdom in the 7th AH / 13th AD century. The Omani port was then known as Dar Al-Fath (The Land of Conquests). It was administered by governors issued from the ruling family or aristocracy of Hormuz, a ‘sanctuary for the fleets and families of ousted Hormuzi kings and pretenders to the throne’, the place was ‘exiles and “kings-in-waiting” passed long sojourns, establishing courts in exile, raising armies and building ships to fit out their fleets for an assault against Hormuz’²⁹. In fact, the princes of Hormuz were vassals of various local Iranian dynasties depending on the political situation, the Salghurid atabegs of Fars or the Saljuks of Kirman, then the Ilkhanid Mongols and finally the Timurids in the 15th AD century, to whom they pledge allegiance and paid tribute. But they were rather independent in the Arab Gulf and Indian Ocean trade, controlling most of the navigation from their ports of Hormuz and Qalhat. They dominated trade eastwards towards the coasts of Africa, India and the Indus and at times all the way to Southeast Asia and westwards to Al-Basra giving way to the land route of caravans in direction of the Mediterranean Sea.

In 641 AH / 1243 AD the governor of Qalhat, Mahmud Al-Qalhati (also known as Mahmud b. Ahmad Al-kusti, or kushi/kashi, in Omani chronicles), became the twelfth prince of Hormuz, ruling as a tyrant. His fleet is said to have attacked and submitted the coasts of the Oman and Arab gulfs up to Al-Qatif, and even some ports of India³⁰. After the death of Mahmud in 676 AH / 1278 AD successions struggles between his sons ended in 689 AH / 1291 AD by the assassination of the entitled ruler Sayf al-Din Nusrat and his family³¹. The governor of Qalhat at that time was Baha Al-Din Ayaz Seyfin, probably the tutor of Mahmud Al-Qalhati’s son Nusrat. He had been appointed at Qalhat by Nusrat or even by Mahmud probably around 679 AH / 1280 AD³². To avenge the death of Nusrat, Ayaz

29 Bhacker and Bhacker, 2004: 33

30 Aubin, 1953: 83-85; Bhacker and Bhacker, 2004: 35-36.

31 Bhacker and Bhacker, 2004: 34.

32 Sinclair and Ferguson, 1902: 160-161.

rebelled against the new king Mas’ud. He raised an army and attacked Hormuz, with the help of the Ilkhanid Farmer General of Fars Malik Al-Islam Jamal Al-Din Ibrahim Al-Tibi, one of the wealthiest Iranian merchants of the time, who had recently established a new merchant dynasty in Qays³³. Then in 693 AH / 1294 AD, the Mongol queen Padishah Khatun appointed Ayaz as her representative at Hormuz. At that period, he shared his time between Qalhat and Hormuz, appointing his wife Maryam to rule Qalhat during his many absences. As the admiral of the Hormuzi fleet, he battled against the Tibis of Qays until he defeated them and ransacked Qays in 696 AH / 1297 AD.

Around 700 AH / 1300 AD, he decided to transfer the city of Hormuz from the mainland in the Minab delta (Old Hormuz), where it was threatened by Turcoman tribes devastating Kirman, to the barren island of Jarun in the middle of the Hormuz straights (New Hormuz). From where he could better control all the Gulf routes³⁴. This stroke of genius gave Hormuz the control of the international trade routes of the Gulf for more than two centuries. In around 711 AH / 1311 AD Ayaz retired to Qalhat where he died some years later, leaving power in Hormuz to the Hormuzi prince Gordan-shah. According to Ibn Battuta and several later narratives, Bibi Maryam built a beautiful great mosque and a mausoleum for her husband³⁵. Maryam continued ruling the Omani port until 718 AH / 1319 AD at least, when she got involved in the struggles for the succession of Gordan-shah, giving refuge to his son Qutb Al-Din Tahamtan for one year. He then succeeded seizing power in Hormuz³⁶. Excavations proved that the city experienced at that time a major development. The great mosque (or Friday mosque) built by Bibi Maryam was recently discovered, a huge and richly decorated building, dated to around 700 AH / 1300 AD. Most of the ancient quarter around the mosque developed and the city

33 Kervran, 1994: 343-344.

34 Aubin, 1953: 92-97.

35 Ibn Battuta, 1982, II: 112; Bhacker and Bhacker, 2004: 37.

36 Sinclair and Ferguson, 1902: 172-173; Aubin, 1953: 103.

expanded greatly, with the emergence of the peripheral quarters. Beside its political and military importance, Qalhat was an important mercantile center in the 7th AH / 13th AD century following the rise of the commercial power of Hormuz on the Indian Ocean trade routes. When Yaquut Al-Rumi visited the region around 617 AH / 1220 AD, Qalhat was the main port of Oman, ‘where most vessels bound to India were at anchor’³⁷. At the end of the century, it is still the only port mentioned by Marco Polo on the Omani coast, “Calatu is a great city, within a gulf which bears the name of the Gulf of Calatu. It is a noble city, and lies 600 miles from Dufar towards the north-west, upon the sea-shore”³⁸. In the Rasulid archives of the 7th AH / 13th AD century, Qalhat is one of the three ports mentioned in the Arab Gulf, with Qays and Hormuz, whose vessels reached Aden between December and February, leaving the port in May³⁹. Hormuz and Qalhat were therefore not only involved in regional trade with the Dhofar and Hadramawt to the west, the Sind and Gujarat to the East, but also in long distance trading with all harbors of southern India⁴⁰.

2.b.4. The Summit of Qalhat’s Glory (8th AH / 14th AD - 9th AH / 15th AD centuries)

After Bibi Maryam’s reign, none of the further Hormuzi governors of Qalhat are known by name, even the one who sheltered Ibn Battuta in 732 AH / 1331 AD. Shortly before Ibn Battuta visited Qalhat, the island of Qays was taken by Qutb Al-Din Tahamtan, leading to the unchallenged supremacy of Hormuz on the Gulf maritime routes⁴¹. Since the time of Ayaz, Hormuz had already a tight control on these routes thanks to an efficient war fleet and a well-organized series of fortresses dotting the shores to prevent ships docking at other places than the Hormuzi ports. This is when links with China strengthened under the Ming dy-

37 Yaquut 1868, IV: 393, transl. G. Ducatez.

38 Polo, Book 3, chapter 39.

39 Vallet, 2010: 552.

40 Vallet, 2010: 555.

41 Aubin, 1953: 120.

nasty (1368 AD). A Chinese fleet under the command of Admiral Zheng He (Cheng Ho) travelled four times to the western Indian Ocean between 1413 and 1433 AD, visiting Hormuz and sailing along the Arabian coast to Aden and Africa, possibly calling at Qalhat. A great amount of Chinese porcelain and stoneware from the 14th and 15th centuries were found at the site. Nevertheless, as emphasized by most literary sources of the time, the port was mainly a center for commerce with India. Indian ceramics at the site are extremely numerous, reaching up to 40% of the total amount of pottery in some areas. Many sandstone tripod trays, a typical Indian implement, were also found, together with two fragments of carved slabs with Indian motives. It is more than probable that an important Indian community was established here. The main commodities traded with India were dates and especially horses as thousands of thoroughbred Arabian horses were sold every year at very high prices to the Indian maharajas for their cavalry. They originated from all parts of eastern Arabia but many of them were shipped at Qalhat, as ‘they cannot approach elsewhere’ as noted in 923 AH / 1517 AD by a Florentine traveler⁴². Contacts between Qalhat and the West, Yemen and Africa, are more difficult to evaluate. The trade links with Yemen seem to have thinned out in the end of the 7th AH / 13th AD century according to literary sources. Rasulid texts mention no ship from Qays, Hormuz or Qalhat in Al-Shihr at that time, and probably no more than a few yearly in Aden⁴³. It must nevertheless be noted that the ‘Mustard’ ware, a Yemeni ceramic production commonly dated to around 650 AH / 1250 AD - 750 AH / 1350 AD, is well represented at the site, testifying rather regular links with Yemen. Qalhat was in any case a wealthy city with a mixed culture and a cosmopolitan population of Arabs, Persians and Indians, notwithstanding other minor communities, like Africans although no more than a handful of African sherds were found at the site.

Politically, Qalhat kept its status of second capital of the

⁴² Corsal, 1830: 365-366.

⁴³ Vallet, 2010: 556.

kingdom, the ‘door of Hormuz’ according to the Qalhatis themselves⁴⁴, until the arrival of the Portuguese: ‘on the coast of Arabia the chief town was Kilhat, the governor and custom master at which overruled those in the other towns in the principality’⁴⁵. It also still plays its traditional role of refuge for Hormuzi princes in misfortune. In 745 AH / 1345 AD, king Qutb Al-Din Tahamtan II was overthrown by his brother and had to take refuge again at Qalhat for one year before regaining the throne⁴⁶. One century later, in 940 AH / 1436-37 AD, most of the attacks led against king Sayf Al-Din Mahar by his brother Turan-shah were organized from Qalhat⁴⁷. The Arab part of the population feared that the power in Hormuz would fall into the hands of the Turco-Iranian elements of the dynasty; the replacement of Sayf Al-Din by Turan-shah II marked the victory of the Arab Omanis⁴⁸.

In the course of the 9th AH / 15th AD century, Muscat replaced Qalhat as the main port of Oman. And in the end of the 9th AH / 15th AD century, Qalhat became a destination among others (Ibn Majid). This is probably due to the progress of navigational techniques allowing fewer stops along the coast-line and the need for deeper harbors, but maybe also to the effect of natural disasters⁴⁹. According to some scholars, Qalhat was damaged by an earthquake around the middle of the 8th AH / 14th AD century, but this assertion cannot be referenced⁵⁰. The only more or less known earthquake could be dated to the last quarter of the 9th AH / 15th AD century. It was possibly the same one which destroyed the high buildings, wind-towers and mosque minarets at Hormuz in winter 887 AH / 1482-83 AD, forcing the king and its court to camp for forty days

⁴⁴ de Albuquerque, 1875-1880, I: 66.

⁴⁵ De Barros, in Miles, 1919: 155.

⁴⁶ Sinclair and Ferguson, 1902: 182.

⁴⁷ Aubin, 1953: 119.

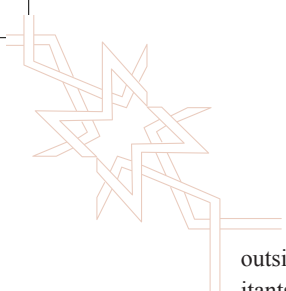
⁴⁸ Bhacker and Bhacker, 2004: 38-39.

⁴⁹ Mountain and Prell, 1990.

⁵⁰ Wilkinson, 1990: 500.



Ancient City of Qalhat. Small tomb © MHC, 2013



outside the city⁵¹. In an anonymous manuscript, the inhabitants of Qalhat are described as rebuilding their city after an earthquake when the Portuguese landed there in 913 AH / 1507 AD⁵². This could be confirmed by the excavations at the great mosque. The port had then lost most of its splendor as noticed by Bras de Albuquerque ‘Calayate is a city as large as Santarem, badly populated, with many old edifices, now destroyed’⁵³. Part of the population lived in reed huts outside the ancient city. But despite this catastrophe Qalhat is still described as a beautiful town with its fortification walls, towers, residences, narrow streets, terraces and windows in the Spanish style, and its population is estimated by some scholars at 5000 to 6000 souls⁵⁴. In his chronicle, Duarte Barbosa described the city as ‘a large Moorish town, of fine, well-built houses, wherein dwell many merchants, wholesale dealers and other gentlemen’⁵⁵. The port ‘was still a great entrapped of shipping, which comes thither to take horses and dates to India’⁵⁶. It is ruled on the administrative and political point of view by a member of the aristocracy sent here every year as a wazir. During this first visit, the Portuguese seemed to have been rather suspicious about the inhabitants who ‘were continually marching along the beach and through the city, armed and clothed like Turks, with bows, lances, swords and scimitars (and on the bank they had a stockade with four mortars)’⁵⁷. Alfonso left Qalhat some days later⁵⁸.

2.b.5. *The Decline and the End (10th AH / 16th AD century)*

Exactly one year after his first visit, Alfonso de Albuquerque anchored at Qalhat again with the aim to attack the city because of a breach of an agreement in which the

governor of Qalhat gave assistance to the King of Hormuz. He noticed that it was defended by a garrison of 200 bowmen, but when the Portuguese, 230 men altogether, began firing their guns on the inhabitants who were stationed on the beach, these fled inside the city ‘as quickly as they could’, up to the foot of the mountain⁵⁹. The Qalhatis tried on several occasions to regain their city but the Portuguese protected themselves from the inside. Eventually, they ransacked it and laid fire to ‘all the principal houses of the city, for in them the Moors had the greater portion of their supplies’, and to the great mosque ‘which fell to the ground, without anything in it which was not burnt’. They also ‘burnt twenty-seven ships, large and small, which lay in the harbor waiting for cargoes in order to sail away to different parts’⁶⁰.

The present excavations could not bring precise information as to the extent of the destructions caused by the Portuguese to the city. Some traces of fighting or destruction were found, such as extensive levels of ashes in the prayer hall of the mosque and evidence of a fire in a jeweller’s workshop for example, but the ceramics of the 10th AH / 16th AD century are not known well enough to allow an accurate dating of the last occupation and collapse layers. Nor do we know to which point the presence of the Portuguese in the Indian Ocean affected the trading activities in Qalhat and in the Hormuz kingdom in general. But, according to the historian De Barros, the vizirate of Qalhat was still the most important Arabian vizirate of Hormuz when the Portuguese eventually subdued the kingdom in 921 AH / 1515 AD. It covered the whole northeast coast of Oman and tax revenues from Qalhat amounted to nearly 60% of the total revenue of the vizirate, when Muscat was around 21%, and Sohar and Khawr Fakkan 8%⁶¹. In 923 AH / 1517 AD, two years after Hormuz fell in the hand of the Portuguese, André Corsal, whose vessel anchored at Qalhat for fifteen days, described the city in a letter to

the duke Laurent of Medicis: ‘This port of Calayate has twenty-two degrees of latitude, and is scarcely greater than Zeila. The houses are built of lime and stones’⁶². Qalhat, as Muscat and Sohar, was then a Portuguese station where the Lusitanian fleet could anchor and the representatives exert duties on the Indian ships at anchor. The city is rather badly documented during this period. According to some scholars, Lopo Vaz de Sampaio, the 6th Governor of Portuguese India from 1526 to 1529 AD, would have razed Qalhat in 1526 because it had revolted against taxes levied by the governor of Hormuz Diogo de Melo, and in 957 AH / 1550 AD the Ottomans would have attack the city and taken it, but none of these assertions are proven⁶³. The importance of the port declined quickly, the tax revenues of the harbor fell down to 1500 ashrafi in 950 AH / 1542-43 AD, and that ‘by the late 1570s, Qalhat’s Portuguese factor, whose salary depended on the level of customs revenues, earned about half of his peers in Masqat’⁶⁴. It is currently extremely difficult to get a precise dating of the thick collapse layers which covered each building and to evaluate the speed of their decay through excavation research. It must nevertheless be noted that one of the two large buildings excavated in the northwest quarter of the city, made of two contiguous houses with courtyards (B94), was still occupied in the second half of the 10th AH / 16th AD century and delivered a certain quantity of Far-Eastern ceramic imports of that period. This house was most probably one of the last occupied buildings in Qalhat. The city was then mainly deserted. Contemporary archaeological levels show squatter occupation in ruined buildings. From the end of the 10th AH / 16th AD century, every visitor to Qalhat emphasized the fact that the city is totally ruined and abandoned. As early as 1592 AD, Sebastiao de S. Pedro, the Dominican monk who left us an abridged Spanish version of the Shahnameh, saw only ruins when visiting the city which he describes as being ‘barren and unpopulat-

51 Aubin, 1972: 89, 112; Ambraseys and Melville, 1982: 181.

52 Aubin, 1972: 112.

53 de Albuquerque, 1875–1880, I: 66.

54 Aubin, 1972: 113, with numerous references.

55 Barbosa, 2010, I: 68-69.

56 de Albuquerque, 1875–1880, I: 66-67.

57 de Albuquerque, 1875–1880, I: 63.

58 de Albuquerque, 1875–1880, I: 66.

59 de Albuquerque, 1875–1880, I: 217.

60 de Albuquerque, 1875–1880, I: 221.

61 Aubin, 1972: 115; Miles, 1919: 155.

62 Corsal, 1830: 356-366.

63 Agius, 1999: 179.

64 Floor, 2006: 34 with references.

ed⁶⁵. In 1617 AD, D. Garcia de Silva Figueroa, the Spanish ambassador to the Safari King Shah Abbas, mentions that “Calayate était autrefois une fort grande ville, & bien peuplée; mais aujourd’hui elle est presque toute détruite et déserte, aussi bien que les autres villes voisines”; he adds that Qalhat Tiwi and Qurayat, although traditionally part of the Homuz kingdom like all the coast of northern Oman, “se sont néanmoins soustraitsily a quelque temps de l’obéissance de cet Etat, qui s’en trouve fort affaibli, avec beaucoup de pertes pour les Portugais”⁶⁶. Sometime later, in AD 1639, the ship of a Carmelite monk, Esprit Julien, was surprised by a tempest on his way from Qurayat to Sur and found shelter at Qalhat, a ‘ruined city’, where they discovered another Portuguese ship and stayed for three days; he observes that ‘there are no shallow places in the sea, even near the shore’ until Qalhat⁶⁷.

In 1835 the traveler J.R. Wellsted, member of the Bombay Marine, achieved an extended journey through Oman. From Muscat he sailed to Sur, landing briefly at Qalhat where he noticed interesting details about ‘a small mosque’, in fact the Bibi Maryam mausoleum⁶⁸. Forty years later, in 1874, the British political agent and consul at Muscat S.B. Miles, visited Qalhat twice and achieved the first scientific survey of the site, publishing very interesting information about it in “The Countries and Tribes of the Persian Gulf”⁶⁹. According to his description, the southern border was a wall running from the sea to the hills. Thus ends the history of Qalhat, until its excavations at the beginning of the 21st century.

2.b.6. Economic History of the Ancient City of Qalhat

Throughout the medieval centuries, Qalhat was an important harbor city. It was also one of the main trade centers in the Arabian Gulf and the south coast of the Arabian Peninsula. It was the assembly point for ships transferring

65 Agius, 1999: 179.

66 Figueroa, 1667: 11-12.

67 cited in Bhacker and Bhacker 2004: 20.

68 Wellsted, 1838, I: 41.

69 Miles, 1919: 473-475.

travelers and commercial commodities from all remote parts of the world; India, the Far East, the ports of the Red Sea and the south coast of the Arabian Peninsula, and the Eastern coast of Africa.

Seafaring horse trading to India from the Arabian ports, in particularly the ports of Qalhat Ancient City and Al-Shahr, was very rewarding. Marco Polo (1272-1296) tells us that “many good Arabian horses are exported from Qalhat to India”. He expressed astonishment at the great number of the Arabian horses that were prepared for battles. These horses were annually shipped from Qalhat, Dhofar, Al-Shahr, Sohar, Eden and the other Arab coastal cities to Hormuz and India. These horses were heading to the kings of Hindus in the furthest southern Indian kingdoms, royal stables and the armies of the sultans of Delhi.

Qalhat Ancient City played a pivotal role in the world trade of the Arab Kingdom of Hormuz. On its own, Qalhat had been dominating the Hormuzian political and trade scene when the New City of Hormuz would be under threat and invasion. Following are the regions covered by the world commercial movement of the harbor of Qalhat Ancient City: (Al-Sindh: the store of Diwal or Daibul or Daibul Al-Sindh, Gujarat: Al-Diew and Kimbayah, Kinkun: Shiul and Dabul, Tilwan: Banda and Jwasindabour, Millibar: Badiqla, Faknour, Kannor and Faliqout, Levant: Aleppo, Tripoli and Alexandretta, and most of the countries located to east of Serendib Island till China).

Despite the deterioration of Qalhat Ancient City because of the earthquake in the last quarter of the 14th AD century, some Portuguese narratives clearly illustrated that the city had maintained its political and commercial significance before and after the arrival of Alfonso de Albuquerque there in 1507. The ruling Hormuzian princes informed him that Qalhat is the gate of Hormuz. At the same time, the Portuguese noticed that Qalhat was a big trade center for the landing of ships that were shipping from there and filled by horses and dates to India. Qalhat continued to maintain the big Yemeni ships that were loaded in the harbour. Barous confirmed Bras’ argument

that: “the main city on the Arabian coast is Qalhat which had the customs management where other cities in the region are controlled”. In 1415 the King of Hormuz received tax revenues from Qalhat that were as twice as what he received from Muscat: (Qalhat 11000 Ashrafi, Muscat 5000 Asharafi).

What makes Qalhat Ancient City as an exceptional seaport is its pivotal role in the world trade of the Arab Kingdom of Hormuz. The Kingdom embraced a seafaring and on-shore civilizational renaissance. It witnessed a broad economic prosperity that was the focus of attention during 3 centuries. It was the strongest political and commercial system in the region. It emerged as a significant trade spot in the 11th century. It reached the peak and prominence in the late 13th century when it became a big center for collecting the commercial goods in the Arabian Gulf region represented by the harbor of Qalhat Ancient City and the harbor of the New City of Hormuz. In the light of the flourishing Arab Kingdom of Hormuz (13th – 16th centuries AD), Qalhat Ancient City emerged as the world trade center.

2.b.7. Contemporary Texts Describing the City of Qalhat

Many Arab travelers and foreign explorers talked about Qalhat during the Middle Ages. They unveiled an abundant material that provided a clear image of the city and enhanced its exceptional world importance.



Mohammed Al-idrisi Geographer and Cartographer. ©<https://www.google.com>

By reading these texts, it is noticed that Qalhat Ancient City occupies a unique status in history. Abu Abdullah Mohammad ibn Sharif Al-Idrisi Al-Qurashi (died in 1169) wrote in his book *Nuzhat Al-mushtaq fi ikhtiraq Al-Afaq*: “Among the cities of Oman are Sur and Qalhat; they are located on the bank of the salty Persian sea. They are small cities but inhabited and they get drinkable water from wells. The coasts of Qalhat and Sur are renown for pearls. There is a big distance of land between Sur and Qalhat but the distance across sea is less than that. The distance from Qalhat to Sohar is 200 miles across the coast”⁷⁰. Shihab Al Din Abu Abdullah Yaqut bin Abdullah Al-Hamwi (died in 1228) was one of the famous writers who wrote about Qalhat Ancient City.



Yaqoot Al-Hamawi © <https://www.google.com>

He states that: “Qalhat is a city in Oman located on the coast. The majority of Indian ships land there. It is now the port of that country. It is the best location in Oman and inhabited by people. Its architecture is not ancient. I think it has been built after 500 AH It is under the control of the King of Hormuz. All its people are till now Kharijite Ibadis; they show their doctrine and never hide it...”⁷¹.

⁷⁰ Al-Idrisi, 1970-1984. *Kitāb nuzhat al-mushtāq fi ikhtirāq al-āfāq*.

⁷¹ Aubin, 1972: 115; Miles 1919: 155.

In his book (Book of Geography) Ibn Said Al-Maghribi (died in 1274) specified the location of Qalhat Ancient City in terms of the latitude and longitude degrees. He says: “You will not meet any urban life in the East Peninsula except in the first part of Oman. Its base is now Qalhat. Its location in terms of longitude is 99 degrees and 60 minutes and the latitude is in the last part of the first region”⁷².



Ibn Said Al-Maghribi.
©<https://www.google.com>

Ibn Al-Mujawir Al-Naisaburi (died in 1291) wrote the following about Qalhat Ancient City: “Qalhat is a town located on the coast surrounded by mountains. It is said that it is like Eden and it has fresh water brought from a distance... Qalhat’s first residents were the fishermen; they were simple people who made their living of what God sends to them. Upon residing there for a long time, they became familiar with the place and they gathered with more people and get connected to them. They became big in number till one day an Arab Sheikh came to live among them. His name was Malik bin Fahm. He was so dedicated to the work of Qalhat. He used to go to the beach and whenever he sees a ship sailing in the sea, he would call the sailors of the ship: Qalhat ‘say come’ which means that he called them to enter the town. Hence the name Qal-

⁷² Costa, 2002: 55-70.

hat was created”. Then he says: “Sheikh Malik settled in the place after he had built a wall of stone and mortar in 615. Then ships would come to Qalhat from different parts of the world. It became a great and magnificent city”⁷³.

In his history book (Ibn Al-Mujawir, 102), he points out that Sheikh Malik bin Fahm Al-Azdi built the peripheral wall in Qalhat Ancient City in 1227. Ibn Al-Mujawir Al-Naisaburi (died in 1291) stresses that Qalhat Ancient City is one of Oman cities. He clarifies the distance between Qalhat and some Omani cities and other regions like Tiwi and Muscat. He points out that: “the cities of Oman are Qalhat, Muscat and Sohar. The distance from Qalhat to Tiwi is three leagues; and from Qalhat to Muscat six leagues...”⁷⁴.

The Italian traveler Marco Polo described Qalhat Ancient City on his way from Venice to China (1226 – 1292 AD). He was astonished at the hardness of the city’s location with regard to place and fortifications.



Marco Polo. ©<https://www.google.com>

He describes Qalhat as: “Qalhat is a very wide city. It is located inside the gulf called also Calatu. It is a beautiful city situated at 600 miles from the northwestern coast of Dhofar. Its population is Muslims following Muhammad

⁷³ Ibn Al-Mujawir.

⁷⁴ Ibn Al- Mujawir: 102.

and they are under the reign of Hurmoz. Whenever the king of Hormuz enters into a war with his strong neighbors, he seeks shelter in this city due to its fortified buildings. Its protected location can protect him against all enemies. Corn is not planted here but it is imported by sea from other places. This city has an excellent port which usually receives trade ships coming from India. These ships find in Qalhat a ready market for their goods because it is the hub from which spices and other goods are transferred to different cities and towns in the Interior. Many good war horses are exported from here to India. Horse trade is a very rewarding business for merchants. I have already referred to the issue of exporting to India from this port. The number of these horses is a countless one. The city is located on the entrance to Qalhat Gulf so no ship can enter or leave the Gulf without an order from the king. Therefore, the king of the city has a powerful domination over the Sultan of Kerman who submits to him. Since a period of time, the sultan of Kerman has been imposing fines on the king of Hormuz or one of his brothers but they refused to pay. The Sultan sent soldiers to force them pay. In return, they left Hormuz, sailed and crossed to Qalhat and settled there and prohibited any ship to cross. This meant a great loss to the sultan of Kerman who had no choice but to make peace with the King and to reduce the high amount of his fines. I would like to add that the palace of the King of Hormuz is as fortified as this city or even more. It overlooks and controls the Gulf and the sea more efficiently. I have already noted the people of Qalhat feed on dates and salted fish where they make abundant savings. However, there are some among them who are wealthy and privileged who feed on better foods”⁷⁵.

Al-Dimashqi Sheikh of Rabwa Shamsuddin Aba Abdullah (died in 1326) wrote about Qalhat Ancient City the following: “Qalhat was built after Sohar and it became Oman’s main port after the destruction of Sohar”⁷⁶.

Ibn Battuta (died in 1377) visited Qalhat Ancient City in

⁷⁵ The travels of Marco Polo

⁷⁶ Al-Dimashqi

1331 and wrote the following about his visit: “... then we arrived in Masirah Island to which the owner of our ship belongs. We stayed there for one day and the owner of the ship went to his house and then he came back. Then we travelled for a whole day and arrived in the port of a big village on the coast called Sur. From there we saw the city of Qalhat on the slope of a mountain. We got the feeling that it was nearby. We arrived in the port in the afternoon or before. When the city appeared to us, I liked to go and stay there for a night. Then we arrived in Qalhat and we were so tired. Upon arriving the city’s gate, our fatigue came to an end when the gatekeeper said: ‘You must come with me to the prince of the city so he can know your case and where you come from’. I accompanied him there. The prince was well-mannered. He asked how I was and hosted me for six days through which I was not able to stand up to my feet due to the pain I was suffering from. The city of Qalhat is located on the coast and had good bazars. It had one of the most beautiful mosques; its walls are with qashani, a material similar to Zellige. It is an elevation where you can look from it at the sea and port. It was built by the good lady Bibi Maryam. In their language, Bibi means “the free lady”. I have eaten fish in this city that I have not eaten in any place. I would prefer it to all meat so I would eat only fish. They grill fish on tree leaves and put it on rice and then eat it. Rice is brought there from India. They are merchants and depend for their living on the sea sources of the Indian Ocean. When a ship arrives there, they become so happy. Their speaking is not formal Arabic though they are Arabs. Whenever they utter a word, they connect it with the sound ‘la’. For example, they say “eat la, walk la, do not do that la. Most of them are Kharijites but they cannot show their own doctrine because they are under the reign of Sultan Qutobuddin Tamahtan, the king of Hormuz, who is a Sunni”.

Abdul Rahman bin Mohammad, Ibn Khaldun (died in 1406) described Qalhat as “the harbor of Oman”⁷⁷.

⁷⁷ Ibn Khaldun



Modern photograph of an Arabian horse © <https://www.google.com>

Ibn Al-Khalouf, Ahmad ibn Mohammad Al-Himyari (died in 1494) did not openly mention Qalhat or use its direct name; rather, he called it (the city of Oman) in his description of the country of Oman. He says: “... and it has many cities; one of them is the city of Oman. It is situated on the coast of the sea. It is a fortified city. On the other side, it is surrounded by a mountain that includes flowing water that has been channeled into the city. It is full of palm trees, orchards and types of fruits. The city of Oman has khans and baths that were built for the merchants coming to the city. The people of Oman eat wheat, barley, rice and corn. The city of Oman has a wall with iron doors and it has many bazars. It is the trade harbor with China. Goods are brought to it from Siraf. The shipment is made in small boats and then it is loaded into big vessels. Then they make benefit of the good wind to sail through the great sea towards India and China...”⁷⁸.

The famous navigator Ibn Majid at the end of the 9th AH / 15th AD century emphasizes that “from Qalhat and Maskat to Makran they can travel twice or three, or four or five times [a year]; or to Gujarat if they do not remain long in

⁷⁸ Al-Himyari

any of the ports. The sea is not closed for any part of the year from Qalhat and Masqat to Gujarat”⁷⁹. Therefore, the port of Qalhat was particularly favored.



Ibn Majid © www.google.com

Alfonso de Albuquerque arrived in Qalhat Ancient City in 1507 and he wrote the following: “Qalhat is a city the same size as Santarem. It is a coastal city with a good port situated on the slopes of the high mountains. At a short distance of the city on land there was a wall that is as long as one spear descending from high mountains to reach the sea”⁸⁰.



De Albuquerque ©https://www.google.com

79 Tibbetts 1971: 227

80 W. de G. Birch. 1875–1880.

In 1507, Brás de Albuquerque wrote the following about Qalhat: “This port is a very good one and is located on the slopes of a very high mountain range and considered as a great center for distributing good...a big trade centre for the ships coming to bring horses and dates to India”. Brás de Albuquerque also described al-Masjid al-Jami’ in Qalhat. He says: “It is a big mosque with a huge structure. It has seven yards for prayer all coated with bricks; their walls are decorated with Chinese ceramics. By the gate from the interior side there is a yard with arched vaults. Above the yard is a terrace overlooking the sea and all of them are coated with bricks. The design of the roof and gates is elegant”⁸¹.

When Alfonso de Albuquerque attacked Qalhat Ancient City in 1508, he wrote the following about the city: “Qalhat is a city with many ancient buildings that have become now destroyed. The sea is attached to the city but the harbor is still in good shape. It is situated close to some high mountainous ranges. In the dry part, at a short distance of the city, there is a wall that is dozen meters long. It descends from top of the mountain and touches the sea. The wall was built by the citizens with the hope of preferring peace with the Arabs of the Interior because they were on dispute with them on many occasions. The Interior is under the reign of a king named Ibn Jabr. He has a lot of knights. There is not even one single tree around the city except some palm trees located near water sources where palm trees get some irritation. All their supplies such as corn, barley, dates and millet come from the Interior because there are a lot of products there. The harbor is a big shop for storing exports. Indians come there to get their supplies of horses and dates and carry them to their country”⁸².

Dawarti Barbossa visited Qalhat Ancient City and he stated that: “Qalhat is a big Arab city, with elegant and well-built houses. It included many wholesale merchants and

81 Costa, 2002: 55-70.

82 de G. Birch. 1875–1880.

other noble people”⁸³.

2.c. Major buildings and material culture of the Ancient City of Qalhat

2.c.1. Bibi Maryam Mausoleum

The Bibi Maryam Mausoleum is the most prominent feature of Qalhat and the only monument still standing on the site. At the end of the 16th AD century, the Augustinian monk and missionary Sebastiao de S. Pedro reported that after the sack by the Ottoman Turks in 1550 AD Qalhat was barren and unpopulated and the only surviving building was the Bibi Maryam mausoleum.

It is a rectangular edifice that was originally covered with a dome most of it collapsed with time. The mausoleum was built in the 14th AD century. The entrance is in the eastern side across an arched opening topped with a fan-like shape composed of grooved and long petals. The dome was supported by a rectangular neck with non-decorated sides and it contained from the inside some vaulted carvings which were conchoidal from the corners. The neck of the mausoleum dome was linked to the square base by four doubled squelches. The external walls were decorated from the southern and northern sides with two levels of flat carvings topped with differently designed and structured shapes. The carvings in the lower level were arranged in groups each of which was composed of three carvings (one big cavity surrounded by two smaller ones). The top level was decorated by two types of nine pavilions topped with lobed arches. At the center of the western wall was the Mihrab. The upper part of the external walls was decorated by shooting slots. The mausoleum has an underground room for burial which extends to almost half of the total area of the building. The mihrab and an entrance of the Bibi Maryam mausoleum closely recall mausoleums of the Fatimid era, e.g. the one of Sheikh Younis in Mosul (487 AH / 1094 AD), as well as mausoleums of the Ayyubid and Mamluk periods when the entrance was located

83 Barbosa 2010.

opposite to the mihrab.

Bibi Maryam mausoleum is one of the exceptional mausoleums in the Islamic world. It is a unique masterpiece in Oman which shows the complex architectural techniques used during the Islamic Middle Ages adopting newer forms allowing the setting up of a dome on a square plan. The general plan of the Bibi Maryam mausoleum resembles other shrines were built in Iran and Central Asia during the Seljuki era (707-591 AH / 1037–1194 AD). In particular, the shape and internal layout of the Bibi Maryam mausoleum recalls the Samanid mausoleum of Bukhara (Uzbekistan), which date back to 295 AH / 907 AD and was probably the first example of this type of structure. Also, the earliest architectural phase of Mullah Hazn mausoleum near Zandjan (Iran), has evident similarities with the Bibi Maryam mausoleum. It was also probably inspired by the Samanid mausoleum of Bukhara, as also the Chelabi-oglu Mausoleum in Iran clearly reveals the tendency of creating a visible upper dimension above a rectangular structure⁸⁴ (See Annex 3).

These structures consisted of large cube-shaped buildings topped with a dome supported by a large square shaped stone. In the 14th AD century, the Mullah Hazn mausoleum was renewed according to the prevailing architectural style of the period, its plan being modified from rectangular to octagonal and the dome raised by adding a serrated dome above the old one. Therefore, Bibi Maryam – together with the earlier Samanid mausoleum of Bukhara – constitutes the unique evidence of an intact and unaltered square-shaped mausoleum that preserves its original plan⁸⁵ (See Annex 3).

The Bibi Maryam Mausoleum in the site is representative of traditional cultures even today. The word “Bibi” has religious and cultural connotations throughout history. It reflects a virtuous, free, striving woman and is used as a name of respect. The use of the name Bibi for the Bibi Maryam Mausoleum corresponds to the respect held for

⁸⁴ d’Errico, 2004.

⁸⁵ d’Errico, 2004

the lady Maryam, the wise woman who ruled over Qalhat in the beginning of the 7th AH / 14th AD century. The use of the name Bibi appears also for other funerary buildings in Persia (Bibi Sourat, Bibi Gul, Bibi Minoh, Bibi Naznin).



Interior view of Bibi Maryam Mausoleum showing the squinches and moqarnas © MHC, 2004

a. 2.c.2. The Friday Mosque ⁸⁶

According to literary sources, the main building of the city was the Friday Mosque, which was already described by Ibn Battuta and Bras de Albuquerque. Ibn Battuta said that: “*The city of Qalhat is on the coast. It has good markets and one of the most beautiful mosques. The walls of the mosque are covered with Kashan tiles, which resemble zelij. It is very high and it overlooks the sea and the port. It was built thanks to Bibi Maryam*”⁸⁷.

Bras de Albuquerque explained that it was, “*a very large building with seven naves, all lined with tiles, and containing much porcelain fastened upon the walls, and at the entrance to the gate a very large nave made with arcading, and above these was, as it were, a terrace looking towards the sea, all covered with tiles; the gates and roof of the*

⁸⁶ Rougeulle, 2008: 7; Rougeulle, 2009: 3-13 / Rougeulle, 2010: 303-320.

⁸⁷ Ibn Battuta, 1982, II: 112.

mosque were all of elaborate masonry”⁸⁸.

Alfonso de Albuquerque described the existence of the Great Mosque and its destruction ordered by him. So, taking valid the account of Alfonso de Albuquerque within the destruction of the city by the Portuguese also the fabric of the Great Mosque has entirely vanished forever in its standing forms, in fact moreover it has never been recorded later by travelers in their accounts. According to Arch. E. d’Errico, it is evident a possible confusion occurred in identifying the Mausoleum with the Great Mosque because the Mausoleum was never sacked and burned by the Portuguese in the sake of the name of Maryam associated to Mary of the Christians⁸⁹.

This architecture is quite unique in the Islamic context. The mosque is located at the southeast part of an architectural complex made of two units, enclosed by surrounding walls, in the middle of the south-eastern quarter of the city. It is an impressive building, 25 m large and 25 m deep, on the sea-shore. The Friday Mosque was discovered in 2007 and parts of it have been excavated since then. It revealed 6 chronological phases dating from the 11th to 12th AD century. The Mosque was built on a high basement and richly adorned with varied techniques. Its walls are exceptionally made of rough coral blocks and mortar. The architectural decorations comprise glazed tiles of different forms such as crosses, stars and rectangles of different colors, with or without reliefs. The mosque was also decorated with fragments of firmware or blue and white porcelain bowls inserted in the walls. Decorated mortar panels, sometimes with inscriptions, and stones completed the decorations of this particular building, thus confirming the descriptions of contemporary visitors. In light of its excavated ruins, the great mosque in the site was a model for the most important Persian mosques that date back to the Middle Ages, at least with respect to ornamentation. It was also a model of the most important mosques in Oman and East Africa dating back to centuries 9th-10th AH / 15th-

⁸⁸ de Albuquerque, 1875–1880, I: 221.

⁸⁹ d’Errico, 2004.

16th AD century at least with respect to ceramics inserted in the walls.

2.c.3. The Hammam

The *hammam* (bathhouse) is situated next to a well at the north-eastern entrance to the Ancient City of Qalhat. It was partially excavated in 2003⁹⁰. It comprises nine rooms, most of them with basins or tubs. The underground chambers served for the heating of the bathhouse. The walls of these chambers were regularly pierced by triangular openings made of terracotta bricks and the walls contain pipes leading from the heating chambers. The cold rooms have not yet been excavated. It stands out as a unique architectural testimony of a *hammam* in the Arabian Peninsula. This bathhouse shows the important influence of the Persian culture enhanced during the rule of Ayaz and Maryam.

2.c.4. The Water Supply System ⁹¹

Qalhat relied on rain, stream and water wells, and on the waters coming from the surrounding mountains at the oases and valleys. Its water system facilities were exceptional. They consist of water cisterns (4) and wells (2) built of stone and sarooj mortar. During the Middle Ages, this type of water reservoir was used in the south of Iran (the island of Hormuz and Qashm). The semi-cylindrical roof was used in Oman during the 6th AH / 13th AD century in Al Muntarab fort in Wilayat Bidya.

One cistern (B2) is located in the western part of the city, next to the Bibi Maryam mausoleum, in the area enclosed by a wall. The structure is rectangular 13.70 m long, 4.10 m large and 5.10 m deep, with a storage capacity more than 280 m³. This cistern is covered with an arched roof (semi-cylindrical) to limit water evaporation. The material found in the excavation dates from the 8th AH / 15th AD century. It looks very much like another roofed cistern observed in

the northern fortress in the field in Ras Al-Khaimah.

There are also two other known cisterns intra-muros and one extra-muros (B9) at the foot of the southern city wall. Potential basins or small cisterns were also registered in the northern part of the site. Underflow cisterns have also been discovered in the mosque's basement.

An uncovered cistern was instead located on the mountain overlooking the site. A water cistern found in the Hawrat Bargha site at Sohar, which dates back to the Nabhani period (1154-1624 AD), significantly resembles this last structure in terms of both architectural style and building materials.

2.c.5. The Dwellings

Information about the spatial organization of the city comes mostly from the Portuguese chronicles. Qalhat is described as a densely-built agglomeration with rather large constructions. This has been confirmed by the numerous recent topographic surveys. The buildings are rectangular and oriented north-south, and they often have a rather complex layout with inside courtyards. Some dwellings probably had two or more floors. The north-western quarter (QNW) shows several groups of houses organized around open spaces or squares. A limited sounding in one house (B91) showed that it was built in the 7th AH / 14th AD or 8th AH / 15th AD century. The twin houses (B94)⁹² are being excavated since 2011 and the preliminary results confirm the existence of a previous building. This construction is composed by two contiguous houses without communication between them. This group of houses was associated to a small mosque (B19)⁹³ and another building (B21)⁹⁴ which were also excavated.

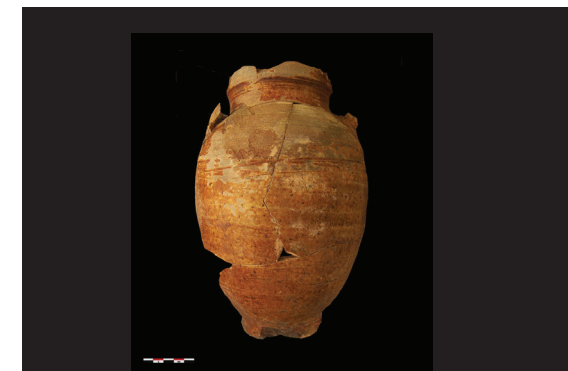
Natural resources were very obviously used in the architectural fabric of Qalhat. This city presents a unique example of the wide use of coral-rock in building as it is the case in the Iranian Hormuz Island. According to Teixeira

in this context, "the archeological remains of the Ancient city of Qalhat bear a unique testimony to the Kingdom of Hormuz culture which used coral aggregate in building construction." According to Teixeira, "the use of coral material to erect dwellings was very common quarrying the material on the bottom of the sea, operation that they call it as fishing stone. This use became popular because the material was very light and easy to carry at the construction site"⁹⁵. The "*Bad Ghir*" or wind towers belong to the building traditions of the Western Iran (City of Hormuz and Qashm) during the Middle Ages.

The numerous soundings and excavations have delivered a great number of archaeological objects which show the importance of Qalhat as a port city or emporium on the Gulf of Oman, having connections with the East as well as the West.

2.c.6. Pottery ⁹⁶

Many structures delivered a huge amount of pottery that came from different origins.



Early Bahla pot found in Qalhat, 16th c. AD © MHC, 2013

They confirm the importance of the ancient city of Qalhat as a center for exchanges with India and the Far East. The ceramics were imported from places as far as China, South

⁹⁰ Vosmer 2004: 396-398.

⁹¹ Rougeulle 2010/1: 15-18.

⁹² Rougeulle, 2013: 9-29.

⁹³ Rougeulle, 2013: 48.

⁹⁴ Rougeulle, 2013: 29-48.

⁹⁵ Bhacker and Bhacker, 2004.

⁹⁶ Rougeulle et al. 2013: 49-50.



Bibi Maryam Mausoleum © MHC D'Errico, 2005

eastern Asia (Burma, Thailand and Vietnam), India and closer by from Iran, Yemen and the rest of Arabia. Effectively, significant differences can be seen in the proportion of productions and also in the origins of the imported ceramics, for example in the twin houses (B94). The origins change between the 6th-7th AH AD 13th-14th centuries with a predominance of the Indian production and the 8th -9th AH/ 15th-16th AD centuries where the local and regional ceramics form the majority of archaeological materials. Thanks to the analysis of the ceramics made in Qalhat,

it will be possible in the future to define the extension of their export throughout the Near East and further into India or even further away.

2.c.7. Non-ceramic Material ⁹⁷

Many objects made out of stone, such as vessels, grind-stones and beads have also been found. Glass bracelets and beads are common. Some of these objects are local, others come from further away. Different copper and iron

⁹⁷ Rougeulle et al. 2013: 52.

objects, as well as slags give evidence of metallurgy on the site. Coins are not rare, although mostly illegible.



Glass bracelets, from India or Yemen, 14-15th c. AD © MHC, 2013

2.c.8. Offshore Finds

Offshore, the underwater soundings from 1998 revealed a certain number of limestone anchors, which weighed less than 40 kg (See Annex 4). The stone anchors found under the sea near the beach of Qalhat can be compared to anchors found in Lothal on the Indian coast and in Al-Baleed on the Arabian Sea coast.

2.c.9. Outside the City Walls

Outside the city walls, there are also traces of human presence in relation to the medieval city. Observation towers and a cistern have been found on the Jabal Al-Hajir Al-Sharqi and modest dwellings as well as tombs have been observed on the other side of the Wadi Hilm.

2.c.10. The Defensive System ⁹⁸

The fortification is very representative of the urbanism

⁹⁸ Rougeulle, 2008: 2-3; Rougeulle, 2012: 24-38.

and history of the city. Qalhat was very strongly defended, with varied constructions as ramparts, towers, gates, advanced walls and extra-muros defensive structures built probably around 1217/1218 AD. The preliminary study of the fortification was based on the mediaeval literary sources, with a plan drawn by Ibn Al-Mujawir around 1230 AD. Sections of a large wall parallel to the sea are also preserved. In the north-eastern quarter, a fortification wall is visible with a breach that proves the presence of a gate. The southern wall highlights the exceptional fortification features in the city. The wall contains several architectural elements, which reflect a strategic function of an utmost importance. The maximum height of the wall was about 3.5 meters; however, it was more than 3 meters thick. The wall has only one gate, two circular towers, and a square tower. There were some ruins of a fourth tower which could not be identified. The wall was made of milestone blocks and was provided with a passageway for soldiers even if they were on horseback. The fortifications have been studied in 2012.

2.d. The Triangular Shape of the General Plan

Qalhat Ancient City provides the best local traditional model of the triangular shape technique of the general plan in ancient Omani settlements and fortifications. We can mention, for example, the triangular shape of the general plan of Khadra bani Difa' fort, As-Sulaif Village, Barka fort and Al-Seeb fort.

2.e. Use of Local Building Materials and Techniques

2.e.1. Local Building Materials in the Ancient City of Qalhat

Rough stones blocks, limestone and coral stone, were mainly used in the construction of the buildings. Bricks are rare but present in the *hammam* as well as pottery pipes. Mixtures made of various percentages of saruj, gypsum and earth were used to create mortars, plasters or

molded decoration. Stronger plasters were refining certain structures as the madbasa for producing date molasses, the walls, floors and basins in the *hammam* or specific decorations in the Great Friday mosque. Palm products like trunks, fronds and fibers, logs of acacia, ziziphus and prosopis were also used.

2.e.2. Local Techniques in the Ancient City of Qalhat / Buildings Construction

The average area of buildings in Qalhat ranges between 300 and 600 m². The biggest buildings are concentrated near the grand mosque on the beach and at the top of the first elevation that is parallel to the sea in the west. The buildings to the south east of the city are generally smaller in size.

The majority of buildings have a rectangular shape. Their designs are most often sophisticated. Most buildings might have had possibly two floors. Some might have had terraces accessible by stairs. Many include spacious courtyards inside. In Oman, the courtyard and the ground floor of a building are used for storing and trade activities while the family would live in the first floor and the roof is protected with a barrier. As a consequence of the slopes in Qalhat, almost every house was overlooking the beach through the roof.

It is likely to find similarity between the buildings in the Ancient City of Qalhat and the traditional houses in Tiwi, and the city's architectural character of the Middle Ages may be similar to the architecture of the archaeological harat which are still preserved in Oman like the archaeological harat in the wilayat of Hamra in Al-Dakhiliyah governorate.

Qalhat and its architecture documented thanks to the excavations and represents a unique example of medieval traditional Omani urbanism that it is still visible in the harat of Central Oman.

2.f. Building of Small Traditional Mosques

During the medieval centuries, small mosques built on a platform were established in Qalhat Ancient City. Nine



Internal view of the Bibi Maryam Mausoleum © MHC, 2005



Internal view of the Bibi Maryam Mausoleum © MHC, 2005



Remains of the Friday Mosque including minbar, pillar and mihrab. © MHC

of these were recorded where every mosque consisted of a courtyard and prayer room with similar dimensions. A mosque placed on top of a platform of the dimensions (16.4 x 8.2 m²) and (1.5 m) high was excavated. The area of the prayer room of the mosque is about (6.5 x 6.5 m²). The Qiblah wall is more than (1 m) thick and its center lies a mihrab that is not protruding towards outside.

The small mosques in Qalhat Ancient City are considered among the style of traditional Omani mosques characterized by their simple construction avoiding exaggeration and decoration. This comes in harmony with the Omani personality characterized with piety, modesty, veneration and tolerance. Therefore, when the traditional Omani mosques are away from residential areas, they are called (worshippers mosques).

According to the style of building the small mosques in Qalhat Ancient City, the Omani traditional mosque in general is a square or rectangular hall with a mihrab cavity in the middle of the qiblah wall opposite to the main



madbasa for the production of date molasses in house B94, 16th century AD. © MHC

entrance. Usually this hall is preceded by a court; part of it can be covered with a roof sometimes. From outside, the Omani traditional mosques do not have any prominent features.

The most common type of mihrabs in the traditional Omani mosques is a shallow cavity built in the same thickness of the qiblah wall without being intruding from outside. The Azan (call to prayer) was performed from the mosque court. But the familiar corridor to the roof remained a feature of the traditional Omani mosques. There is no external landmark indicating it but an arched small tower (buma) covering the stairs of the internal wood ladder leading to the roof where the caller to prayer would ascend to overlook the roof of the mosque through the buma and call for prayer.

One of the less common ways to reach the roof in order to call for prayer in traditional Omani mosques was represented in external stairs built along one of the lateral walls. The external stairs can also be seen in many other

traditional Omani mosques such as Al-Jinat mosque, Al-Sharja mosque and Al-Moud mosque in Nizwa, Ain Al-Sawad Mosque in Izki and Al-Rakka mosque in Al-Khaboura. Among the other models of the traditional Omani mosques that are similar to the small mosques in Qalhat Ancient City are a mosque in Wadi bani Habib, Al-Jabal Al-Akhdar, Wadi Hilhil mosque in Al-Rustaq, Fatih Al BuSaid mosque in Baushar, a mosque near the village of Siya in Al-Qabil and Al-Safa mosque in Sital in Al-Awabi. As for the traditional plan of the buildings, the small terrace mosques in Qalhat are earlier unique examples of a kind of religious architecture that continued to be used during the centuries in the Gulf region, as the examples indicated above could show.

2.g. Production of Date Molasses

Two stores were discovered in Qalhat Ancient City. They were used to preserve dates for a long period of time during which dates molasses (*dibs*) is produced. Dates store (*madbasa*) is considered as one of the economic familiar public and private facilities throughout history in Omani sites such as cities, villages, settlements, forts, castles and bazars. The big dates store at Qalhat Ancient City is rectangular (3.00 x 2.50 m). Its floor contains 23 open and juxtaposed channels in the form of a horseshoe leading to a pit in which a pottery pot is fixed inside.

The features of the ancient stores of dates in all around Oman are the same; the store has no windows and it has a tightly closed door. It provides the suitable temperature that can help discharge molasses (*dibs*) from the frond date bags. The Discharge of date's molasses would increase due to the pressure resulting from the tight arrangement of the dates bags over each other. The molasses continues to flow across the molasses machine and gathers inside the pottery pot. Date molasses is considered one of the palm products that have exceptional economic significance through ages.



Ancient City of Qalhat. Jug (ceramic kilns, 14th c. AD) © MHC



Ancient City of Qalhat. Imitation of Hormuzi jar © MHC, 2010



Ancient City of Qalhat. Chinese blue and white porcelain, mid-16th AD c © MHC, 2010

2.h. Environmental Studies ⁹⁹

Marco Polo cited that Qalhat had no local resources for grain and made it come from abroad: “They grow no corn here, but get it from abroad; for every merchant-vessel that comes brings some. The haven is very large and good, and is frequented by numerous ships with goods from India, and from this city the spices and other merchandize are distributed among the cities and towns of the interior”¹⁰⁰. Ancient travelers reflected that the inhabitants of Qalhat lived mainly on fish and dates. Marco Polo cites, “The people of this country live on dates and salt fish, which they have in great abundance; the nobles, however, have better fare”¹⁰¹. Ibn Battuta says, “*I ate in this city kinds of fish I never tasted in any other region before, and which seemed to me much better than kinds of meat. It was used to be grilled on tree leaves and eaten with rice*”¹⁰².

These citations are astonishing and they give all reasons to reconstruct the environmental and economic patterns of the medieval city. Therefore, several studies concerning archaeobotany have been initiated. These may provide evidence of trading systems, diet of the population and livestock as well as the understanding of energy resources such as wood management in a region with scarce trees.

2.i. Ceramic Manufacturing

In 2008, remnants of slag and ceramic were found scattered on the surface in Qalhat Ancient City. This helped discover the ceramic factory (structure 41). Excavation works were carried out which resulted in the discovery of many furnaces that date back to the 14th century. Great amounts of ceramic were found in the settlement layers of structures (94 and 21) given the fact that structure (94) was built in the late 13th century and was settled till the first half of the 14th century. The last settlement of the building was in the 16th century.

⁹⁹ Rougeulle A. et al. 2013-2014, Second part.

¹⁰⁰ M.Polo, book 3, chapter 39.

¹⁰¹ Ibid, 112

¹⁰² Defremery and Sanguineetti 1854.



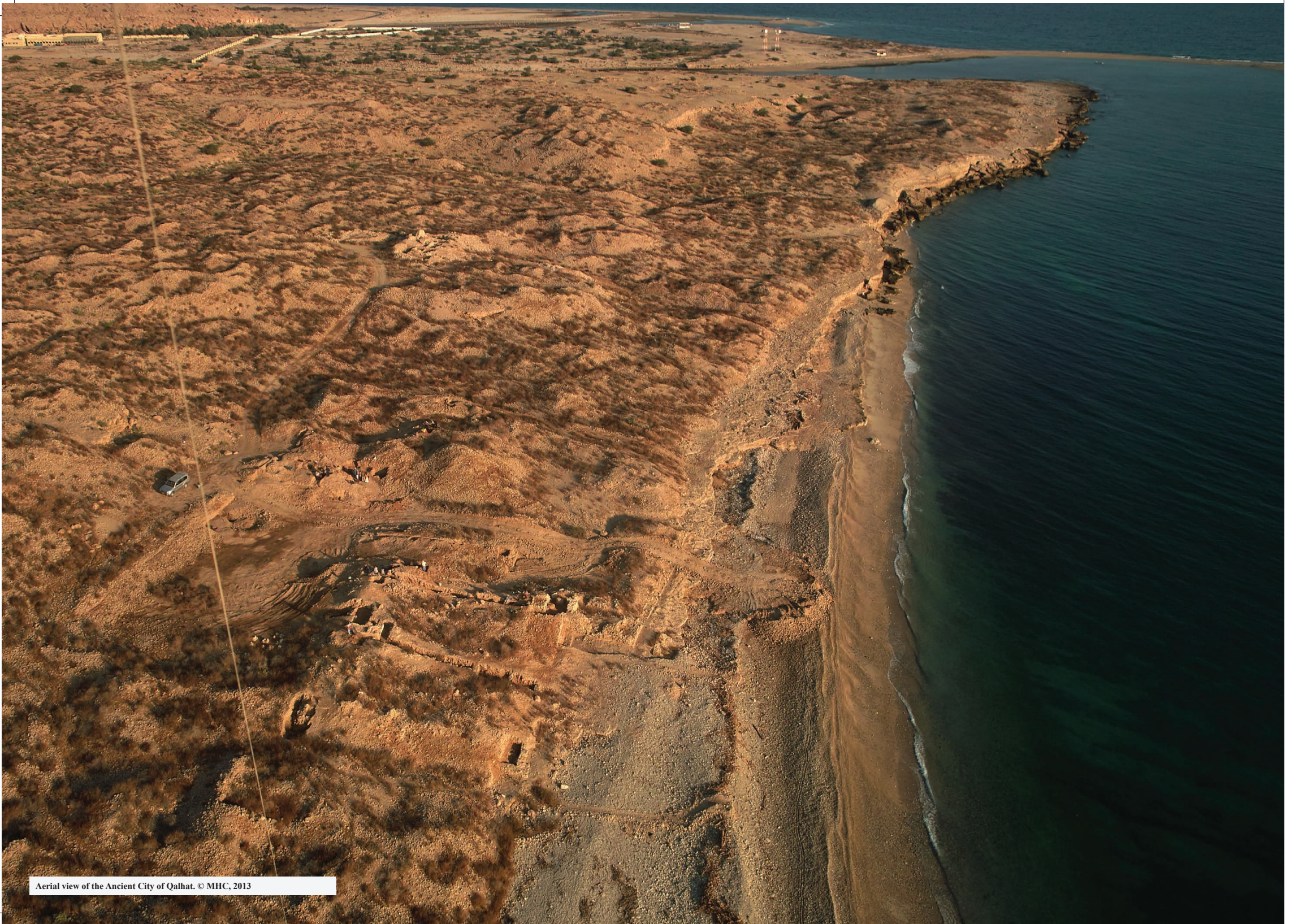
The cistern in (B2) is located in the western part of the city, next to the Bibi Maryam mausoleum © MHC, 2007

2.j. Underwater Archaeological Finds

Beside the offshore findings in the site, underwater excavation works by an Australian team found 25 stone anchors, rectangular and ring-shaped, near Qalhat harbour. The lithic finds at Qalhat comprise Indo-Arabian stone anchors and anchor fragments, ring stones, three-hole ‘Mediterranean’ or ‘Red Sea’ stone anchors, a single-hole stone anchor and an object that might be part of a Greek anchor dating from the 6th- 4th centuries BCE, a previously unknown type of stone anchor, or an unrecognised

(probably architectural) object. These artefacts constitute the largest underwater collection of Indo-Arabian stone anchors known anywhere in the world. As such they are very important to both the history of Oman and the body of knowledge of maritime archaeology¹⁰³ (See Annex 4).

¹⁰³ Costa 2003; Vosmer et al. 1998.



Aerial view of the Ancient City of Qalhat. © MHC, 2013

Section 3

Justification for Inscription

3.a. Justification

3.a.1. Brief Synthesis

The Ancient City of Qalhat, situated on a narrow triangular rocky plateau, stands out as a harbour with a key position on the Sea of Oman, well sheltered by its position at the foot of the Eastern Al-Hajir Mountains. Its location on the coast of the Sea of Oman with an opening on to the Arabian Sea and the Indian Ocean, its natural shallow beach and the fact that the port was accessible all year round made it an important center of trade in direction of Asia and India in the Islamic Period. Historically, Qalhat is considered as the mythical first capital of Oman, founded by Malik ibn Faham, the mythic king of a branch of the 'Azd tribe who migrated from Yemen through Hadramawt to Oman after the collapse of the Ma'araab Dam in 115 BC. But even more important is its relation with the Hormuz Kingdom. Many factors link Qalhat to Hormuz on a political, administrative and economic scale. No wonder the city of Qalhat is considered either as a twin city to Hormuz or as a second capital. It served as a refuge during periods of disorder but also as a center for posterity. This is reflected in the town planning and the designs of the magnificent buildings which have recently been unearthed. The traditions were many ways the same. Qalhat will certainly allow a better understanding of the structure of the Hormuz Kingdom since the original cities of Old and New Hormuz have been completely destroyed and are still inaccessible today. Qalhat had a leading role in the field of worldwide trade and has undergone influences from many cultures. This is

mentioned in contemporaneous texts and equally proven by architectural techniques and finds made on the site: the Persian influence is seen in the only hammam of the Arabian Peninsula. Arab horses, dates, incense and pearls were probably among the most precious goods exported from Qalhat, but one should not ignore the growing importance of the distribution of Qalhathi pottery in the Eastern world. These were bartered against many other goods as food-stuffs, silks, and precious earthenware from as far as China or Southeast Asia.

The site has an outstanding archaeological potential. It allows understanding the medieval urban topography as if it had been abandoned just yesterday. Amongst the unearthed buildings, the Friday mosque, the Bibi Maryam mausoleum and the hammam should certainly be mentioned; but less imposing monuments also help understanding life in an Arabian port in the Middle Ages. Archaeological research in the future will confirm the importance of the relations with India, China and other countries of the Far East as they are known from numerous contemporaneous texts.

3.a.2. The Criteria under which this Inscription is Proposed (and Justification for Inscription Under these Criteria)

(iii) *Bears a Unique or at Least Exceptional Testimony to a Cultural Tradition or to a Civilization which is Living or*

which has Disappeared

The Ancient City of Qalhat presents a unique testimony to the great Kingdom of Hormuz in its Arabic and Islamic identity, which prospered from the 11th to 16th AD century. Qalhat played a significant role in the development of the Kingdom of Hormuz thanks to its strategic position on the eastern coast of Oman. The planning of the town and the buildings excavated amongst the ruins show great similarities with the few buildings and ruins left from the kingdom's period in New City of Hormuz in Iran. Qalhat is by no doubt the most significant and complete representation of the great kingdom of Hormuz, its typical architecture, its traditions and civilization, as well as its political and commercial activities. The fact that Qalhat has been totally abandoned since the middle of the 16th century and that no modern settlement has disturbed the site makes this site of great value for archaeological research on the kingdom of Hormuz and on the period between the 5th AH / 11th AD and the 10th AH / 16th AD centuries in this part of the world. The archaeological site has great potential and will in the future allow understanding more about the ways of life in medieval Arabia and confirming the importance of the international exchanges as described by the contemporaneous visitors such as Ibn Battuta, Marco Polo and many others.

(iv) *An Outstanding Example of a Traditional Human Settlement, Land-use, or Sea-use which is Representative of a Culture (or cultures), or Human Interaction with the Envi-*

ronment Especially When it has Become Vulnerable under the Impact of Irreversible Change

The Ancient City of Qalhat is an outstanding example of traditional town development and building techniques answering the constraints of the local environment. Its positioning between the mountains, the deep wadi and the sea was certainly a strategic choice, since it ensured protection from all sides. Qalhat is an extraordinary reflection of a traditional human settlement in a medieval Islamic port city, the town planning shows different quarters, sometimes fortified, defined by their use (religious, economic, etc.) and correspond to what was known of the City of Hormuz. Also, the material used for the construction of the town was essentially coral rock which was gained from the reefs in front of the city. This choice of material may have seemed adequate for buildings that needed air flow and lightness but it also signed the doom of the city when a fatal earthquake struck. The fact that site is intact since its abandonment makes it a fine presentation of the kingdom of Hormuz in all its cultural and commercial aspects. The local environment of Qalhat is harsh. There is little access to fertile plains or valleys. Therefore, the survival of the population was mainly based on fishing, date-palm cultivation or importations from the inland or from abroad. The preservation of these food-goods were essential, therefore traditional techniques such as the drying of fish or the preservation of dates were certainly used in Qalhat, not only for local use but maybe even for exportation. Qalhat was also a production center for pottery and certainly metallurgy. The study of the pottery production has shown that it is of a very good quality and that it has probably been exported to Hormuz and other places in the world.

(vi) Directly or Tangibly Associated with Events or Living Traditions, with Ideas, or with Beliefs, with Artistic and Literary Works of Outstanding Universal Significance

Since the Pre-Islamic period and until the Middle Age, the Ancient City of Qalhat was directly associated with great events and traditions of outstanding universal significance.

The first of these traditions is related to the development of structural and decorative Islamic architecture. Several of the main monumental buildings of the Ancient city of Qalhat are significant not only for the study of the local development of building techniques and decorative styles, but also for the comprehensive understanding of the early Islamic architectures. The physical integrity of the Ancient city of Qalhat allows in fact a detailed study and reconstruction of specific architectural forms, building techniques and decorative styles that are only very poorly documented at other few sites. This is the case of the Bibi Maryam Mausoleum, which can be studied and interpreted in very high detail in all its structural and stylistic components, allowing a better understanding of other contemporaneous buildings, such as the Mullah Hazn Mausoleum near Zandjan and the Chelabi-oglu Mausoleum in Iran, the Mausoleum of Sheikh Younis at Mosul in Iraq, and the Samanid Mausoleum of Bukhara in Uzbekistan. The chronological development of this important architectural form is still debated and, unfortunately, most of these buildings are now destroyed or lie in very bad conditions. Thanks to its exceptional state of preservation, the Ancient city of Qalhat might instead provide a unique opportunity to better understand the foundation and development of architecture in the whole region interested by Islam during the Medieval times.

However, the importance of the Ancient city of Qalhat is not only in the physical remains of magnificent buildings and precious artifacts, but also in its significance for the development of the local culture in terms of tales and beliefs. The second event is related with a corpus of living beliefs, which even if not fully proven by archaeological and historical data, contributed greatly to the creation of the local culture. In particular, a semi-legendary tradition reflecting a long trail of 'Azd migrations from western Arabia to Oman and Iran implies the foundation of Qalhat as an important site linked to the emergence of the first Arabian state in Oman, which was later involved in the and fall of the Hormuz Kingdom. Qalhat had always

shared strong links with Hormuz since its very beginnings, but it is clearly part of the Hormuzi kingdom in the 7th AH / 13th AD century, and an important one gaining the name of Dar Al-Fath (Land of Conquest). The third outstanding element in relation to Qalhat is its importance as a mercantile exchange center on the Sea of Oman with outreach towards the Indian Ocean. In addition to the available archaeological data, most of the major travelogues of the time described the city in detail, providing detailed information on its urban setting, the lifestyle of its inhabitants and the commercial importance of the city in the maritime trading networks across the Arabian Sea. The documentation and study of the almost untouched archaeological site of the Ancient city of Qalhat might contribute to substantiate the authenticity and accuracy of texts and authors such as Marco Polo (1226 – 1292 AD), the Nuzhat Al-mushtaq fi ikhtiraq Al-Afaq by Abu Abdullah Mohammad ibn Sharif Al-Idrisi Al-Qurashi (died in 1169), Shihab Al Din Abu Abdullah Yaqut bin Abdullah Al-Hamwi (died in 1228), the Book of Geography by Ibn Said Al-Maghribi (died in 1274), Ibn Al-Mujawir Al-Naisaburi (died in 1291), Ibn Battuta (died in 1377), and many others.

3.a.3. Statement of Integrity

The site covers all chosen attributes corresponding to the above defined criteria. The ruins of the Ancient city are totally preserved under the rubble caused by the destruction of an earthquake and the attack by the Portuguese in the 16th AD century . It has never been occupied since then. The results of the geophysical survey confirmed the existence of more than 2800 houses under the ruins, organized in quarters. Some of the buildings have been excavated and show similarities with those of the first capital of the Kingdom of Hormuz, which has been almost totally destroyed. The city includes important elements corresponding to an utmost important Islamic town such as the Friday Mosque which could certainly be seen from far away on the sea, the Bibi Maryam mausoleum as an outstanding example of funerary architecture, the hammam near the entrance of

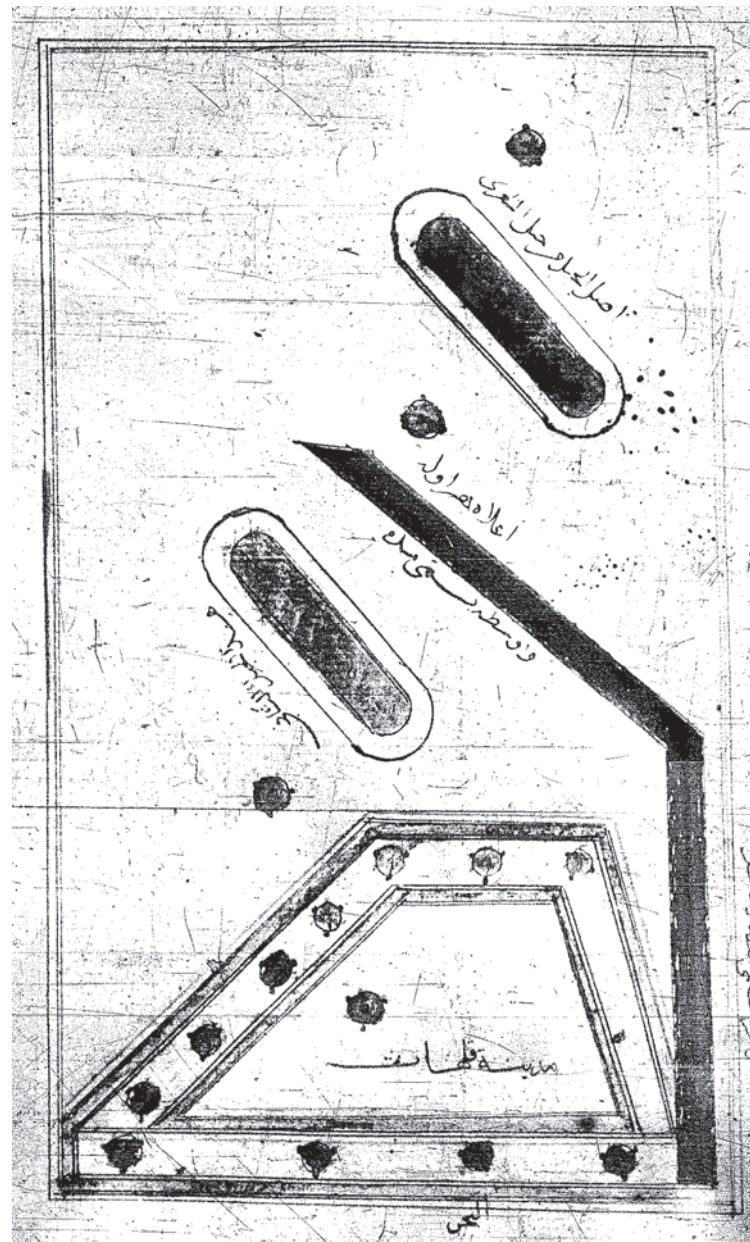
the town and many entrapped buildings showing the importance of this port. The array of finds, including wares from as far away as China or Southeast Asia, confirm the international importance of this city in the Islamic Middle Ages. The material used for the constructions was entirely local, showing a great dexterity of applying regional materials for the construction of mighty monuments. Historical documents and stories told by historians, travelers and geographers are confirmed by the discoveries made by the archaeologists on the site. Qalhat has just started to reveal many of its historical treasures.

The property includes the whole of the Ancient city of Qalhat, with the southern part which was used as an entrapped and for the gathering of goods (amongst them horses), ensuring a representation of the medieval city and its function as an administrative and economic center in its whole. The buffer zone includes further elements linked to the protection of the city, such as the towers and water cisterns on the Jabal Al-Hajir Al-Sharqi Mountain behind the city.

The whole of the Ancient City of Qalhat is an archaeological site under protection of the Government of Oman, which safeguards it from any development pressure. The small village of the modern Qalhat is situated on the other side of Wadi Hilm and cannot extend further to the South. The Qalhat Development Project, which started in October 2012 and will end in 2017, ensures a development process including excavation, conservation and a tourism development plan for the site. The application of the final draft management plan will ensure that the integrity of the site is maintained and where archaeological excavations take place, the information will duly be gathered, archived and the knowledge distributed for the population (the results announced publicly).

3.a.4. Statement of Authenticity

Once again, the abandonment of the site plays a positive role in the conservation of its authenticity. The site has never been occupied and no later re-use ever took place,



Sketch of Ibn Al-Mujawir around 1230 AD showing Qalhat ©

therefore it preserves all characteristics of locational choice, organization, function and particular architectural techniques corresponding to the Islamic Period in general and the period of the Hormuz Kingdom in particular. The “frozen” spatial organization of Qalhat offers the best relicts of the social and economic urban planning in the early medieval cities on the Arabian Sea. And the use of traditional building materials and in particular coral stones is of upmost importance since it is proof of relations with the Kingdom of Hormuz. These materials are still used for the conservation of the excavated buildings in Qalhat. The excavation program includes the research of certain important elements of the medieval town, concentrating on public buildings such as the Mosque and the hammam, but also on important commercial and private constructions like the pottery atelier and the twin houses. This allows a gain of information, which will integrate in the long-term management for public access. The location of Qalhat between the mountains, deep valleys and the sea is untouched by modern constructions, and not threatened by the modern highway which passes just behind the site. Qalhat constitutes an integral part of the memory and tradition of the people for its archaeological significance and its international history but also in its attachment to local values. Moreover, the traditions particularly in relation with the Bibi Maryam mausoleum are still alive amongst the local population. This is still represented in the local dialects and customs.

3.a.5. Protection and Management Requirements

The administrative organization responsible for the protection and management is the Ministry of Heritage and Culture. The management of the site is organized as follows:

According to the statute of the State (The Constitution), and the mandate approved by the Royal decree for the Ministry of Heritage and Culture, the Ministry remains as the main official body responsible for the protection, management and safeguard of this site.



Fragment of the inscription around the *mihrab* of the Friday Mosque c.1300 © MHC

The Directorate General of Archaeology as a part of the Ministry's Administrative structure looks after the constantly management of the site through the mandate of its four main departments with the support of other departments:

- Department of Archaeological Excavations & Studies.
- Department of Restorations & Maintenance.
- Department of World Heritage Sites
- Department of Underwater Archaeology

In the larger context of the de-centralization structure of the administrative structure of the Ministry, its regional office in the South Al-Sharqiyya, close to the site, involved as well in monitoring all activities on the site.

The protection and management of the site is controlled by the laws and regulations of the government of Oman in respect to the UNESCO Convention concerning the protection of world cultural and natural heritage adopted on 16th of November 1972¹. The current framework regarding the protection of the property is the National Heritage Protection Law promulgated by Royal Decree No. 6/80 (See Annex 1&2). The Ministry of Heritage and Culture ensures its commitments to all the mechanisms specified by the said law to implement the required protection measures for the site. The city protection measures have been enhanced by the extraction of the Site plan (Kroki) and the certificate of title. The Qalhat Development Project, which started in October 2012 and will end in 2017, ensures a development process including excavation, conservation and a tourism development plan for the site. The adaption of the Final Draft Management Plan will ensure the protection and long-term development of the site. The State Treasury will ensure all the required financial and qualified human resources in order to ensure the necessary requirements for protecting and administrating the site of Qalhat in a sustainable way.

Amongst the long-term expectations for the protection and management of the property, we can mention improving

the legal and regulatory system for the preservation cultural heritage, continuing development of the management system, guaranteeing collaboration between all partners, monitoring of the site including systems of prevention against natural threats and the development of a sustainable tourism strategy for the site. The first and most urgent measure is the preparation of a management system including an ambitious management plan for the Ancient City of Qalhat in collaboration with *The World Monument Fund* in which the protective measures and the management mechanisms for the site will be clearly identified. The Final Draft Management Plan will also ensure that risks and vulnerabilities in buildings which were excavated.

3.b. Comparative Analysis

The Ancient City of Qalhat is one of the most important archeological sites in the Sultanate of Oman. Although hypotheses about its foundation before the 11th AD century have not been proved, this archeological site already revealed an enormous amount of archaeological and historical data fundamental for the reconstruction of its cultural and social-economic significance in the framework of the rise and fall of the kingdom of Hormuz and of the trade networks across the Arabian Sea during the Medieval times. Since its foundation, Qalhat was one of the most significant port cities on the Arabian Sea, but it reached a prominent position when it was formally included in the kingdom of Hormuz as its second capital after the New City of Hormuz. During the supremacy of the kingdom of Hormuz, Qalhat prospered and became one of the most active commercial sea-trade centers in the Gulf region and in the southern coast of the Arabian Peninsula. The city and its major families developed a strong commercial and political power. It was very famous for its horse trading, as well as for the export of precious items like pearls and frankincense. Unfortunately, its glory was put to an end by a strong earthquake and by the subsequently attack by the Portuguese fleet at the very beginning of the 16th cen-

tury.

Nowadays, the undisturbed remains of the Ancient City of Qalhat are the most important witnesses of the cultural and commercial magnificence of kingdom of Hormuz.

The following comparative analysis will focus on the most significant attributes of the Ancient City of Qalhat, as the second capital of the kingdom of Hormuz and as a commercial medieval Islamic port city in the region, including references and parallels from the region historically included in the kingdom and interested by the extension of its commercial activities.

In the Sultanate of Oman

Khor Rori (Sumhram) (WHS)

The port city of Khor Rori was situated 40 km to the east of Salalah, in the Dhofar Governorate of the Sultanate of Oman. The site is located on a hilltop on the eastern bank of a sweet-water outlet (*khor*). The port was founded around 300 BC to control the trade of frankincense from Dhofar and became soon a major hub for highly diversified trading activities encompassing a large commercial network. The settlement was abandoned around the 5th AD century. Scientific archaeological excavations in the site have confirmed the maritime contacts with the Hadramawt regions, but also with India and far to the Mediterranean. The remains of the fortress, a wide defensive system, the gates and the towers still testify to the importance of this port city during the Early Islamic Period. For many reasons, Qalhat can be considered the historical inheritor of Khor Rori during the Islamic periods and, being an almost a complete and untouched manifestation of a medieval port city, the archaeological site of Qalhat might also help to throw light to the settlement structure and trade organization previously developed by the earliest entrepot of Khor Rori.

Al-Baleed (WHS)

Al-Baleed was a port located directly on the shores of the Indian Ocean, on the coastal strip of Salalah in the area between Dhariz and Hafa.

¹ <http://whc.unesco.org/en/conventiontext/>.



Al-Baleed, Dhofar Governorate (WHS) © UNESCO
http://whc.unesco.org/include/tool_image.cfm?id=118840&gallery=site&id_site=1010

The importance of this harbor within the Maritime Silk Road was testified by the discovered of artifacts imported from China (Ming Dynasty) and by other findings that also demonstrate the wide range of the trade network based on the export of frankincense and horses. The port city was attacked and partially destroyed on several occasions during the 13th AD century , and was eventually abandoned in the 15th AD century . In this period, when Al Baleed was slowly declining, Qalhat witnessed instead its golden age and flourished thanks to its inclusion in the Kingdom of Hormuz.

Sohar

The port city of Sohar, at the centre of the the Al-Batinah coast, was the capital of Oman since it was established in the 1st AD century and up to the 13th AD century . It was one of the most famous port cities of the time. Archaeological surveys and excavations have disclosed a settlement dating back to the pre-Islamic periods and the findings proved its central importance as trading center. Sohar reached its peak in the Islamic period around the 10th AD century and started declining between at the middle of the 13th and the 15th AD century . The city prospered at the times of the kingdom of Hormuz and declined when

Portuguese took over. Several historical documents also mention that Sohar was an important port in the Kingdom, though not as important and powerful as Qalhat. Unfortunately, the fort – built by the princes of Hormuz – is the only monument remaining from the times of the kingdom and the Portuguese modified it consistently. Therefore, Qalhat with its remains, monuments and its historical position as the second capital of the kingdom of Hormuz still represents the most complete manifestation of this kingdom.

Sites within the Islamic Republic of Iran ***New City of Hormuz – Hormuz strait (Iran)***

Hormuz island is located 15 km southeast of Bandar Abbas and the ruins of the old Hormuz are still visible on the coast next to Minab river. The trading position of Old Hormuz was of a great importance till 1300 AD, when the kingdom's capital was moved from the mainland to the more secure island of Juron, which was then called Hormuz and flourished as trading center with contacts to India and the Gulf between the 14th and 17th centuries AD.

When the New City of Hormuz was founded on the island around the 13th AD century , as the new capital of the kingdom of Hormuz, it controlled along with Qalhat all the kingdom political and commercial activities. Unfortunately, following the first destruction by the Portuguese and after an earthquake hit it, the city it was completely destroyed by Shah Abbass. In 1979, excavations revealed the ruins of the Portuguese fort, and only scanty fragments of the Al-Za'faraniyya house and of three towers, of the Bibi Ghol mausoleum, of two arched water cisterns and a small section of the city's walls. Contrary to Qalhat, which preserves most of its buildings untouched as primary witnesses of the kingdom magnificence, the excavated remains of New City of Hormuz are very few and scarcely informative.

Siraf (Iran)

The ancient port city of Siraf is known today as the modern Taheri. Siraf was located on the Iranian coast of the

Persian Gulf and it was mentioned in the travelogue of Ibn-AlFaqih (850 AD). Siraf port city was a leading port in the maritime trade network across the Arabian Sea and the Indian Ocean between the 9th and 11th centuries AD. It was a prosperous city with impressive buildings and multi-story houses when it was heavily damaged by an earthquake in 977 AD and started to decline. However, it was still an important entrepot during the kingdom of Hormuz. Excavations between 1966 and 1973 uncovered a large portion of the city's largest mosque, a palace, a residential area, the bazar and the potter's quarter, while other components include a large building on the shore and a momentous cemetery. However, the most spectacular feature of Siraf were the cemeteries in Shilou valley, which consisted of numerous rock-cut graves. Siraf and Qalhat shared several aspects of significant Islamic port cities and centers of trades in the medieval periods, although not from same periods. Unfortunately, Siraf was later partially submerged under the seawater. Moreover, infrastructural development has heavily affected Siraf, since the modern road crosses the ancient site and the modern city of Taheri partially covers the adjacent site, disfiguring the original natural scenario of Siraf and threatening further the archaeological remains. Siraf featured a sea wall, which in 1933 according to the visit of Sir Aurel Stein extended for over 400 m, but none of its parts survived until the present-day.

Sites within the Arabian Peninsula ***Julfar (Ras Al-Khaimah, UAE)***

The ancient port of Julfar in Ras Al-Khaimah was a major port and an important trading center during the Islamic era and until the late 17th AD century , when it fell into decline after the Portuguese took over many cities in the Gulf. Julfar was historically famous for its pottery, which was exported to the Gulf area for more than 500 years. The name Julfar refers to many towns in the same area, from the 14th till the 17th centuries. When the inhabitants abandoned the islands of Al-Kosh and Al-Halila and settled on the shore, this area was called Julfar. Julfar was considered the third

city for importance in the Kingdom of Hormuz, after the city of Hormuz and Qalhat. The archaeological excavations in the area have revealed that it was a relatively large city with an important population between the 14th and 17th centuries AD. Houses were made of mud bricks and protected with a thick and high walls. Excavations from 1991 have uncovered remains of a mosque of about 20 x 20 m, and of a rectangular building. Two other important monuments still stand in the same area: the Al-Zabaa' palace, which dates to the medieval ages, and the Daia fort built in a strategic location in the Al-Ramas city in the 16th AD century. Although the remains of Julfar are of a great importance, they are very badly preserved and does not present a full and comprehensive image of the kingdom of Hormuz.

Qala'at Al Bahrain, Ancient harbor (Bahrain) (WHS)

Qala'at Al Bahrain is one of the few World Heritage Sites that represents human cultural and social-economic civilization from 2300 BC till the 16th AD century. It includes unique testimony of the Dilmun civilization and of the later Islamic periods.



Qala'at Al Bahrain (Bahrain) (WHS) © Tim Schnarr
http://whc.unesco.org/include/tool_image.cfm?id=116852&gallery=site&id_site=1192

Bahrain became a part of the Kingdom of Hormuz in 1330 AD and the construction of the main fortress begun during the Hormuz era with a simple fortified enclosure at the beginning of the 15th century. It was later completed by the Portuguese at the beginning of the 16th century. Qala'at Al Bahrain was one of the major ports associated with the maritime trade routes of the kingdom and it is likely that it gained much more importance after the destruction of Qalhat in the early 16th AD century. This connection would also explain why the construction of the fort at Qala'at Al Bahrain begun at the beginning 16th when the kingdom lost Qalhat. Consequently, Qalhat still reflects the heritage of the Hormuzi culture better than any other known site. Although Qala'at Al Bahrain included sites that date much earlier than Qalhat, it was not a major port of the kingdom of Hormuz until the very last period of its existence.

Al Zubarah Archeological Site (Qatar) (WHS)

Al Zubarah is a walled coastal town which has prospered in the late 18th century and early 19th AD century as a major pearling trading center. Additionally, it was famous for its palaces, mosques, streets, courtyard houses, and fishermen's huts. Its harbor, the double defensive walls, the canal, the walls, and the cemeteries testify to a new era in the Gulf region and can be better understood in comparison with Qalhat, which is a testimony of an earlier medieval port city in the region during the kingdom of Hormuz.

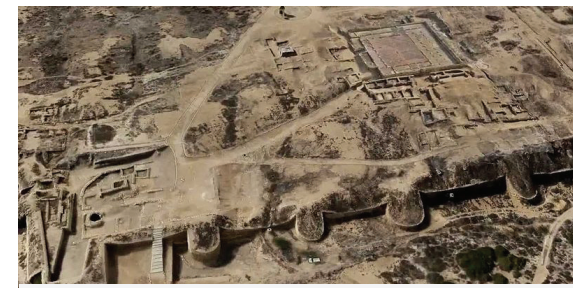


Al Zubarah Archeological Site © Vincent Ko Hon Chiu
http://whc.unesco.org/include/tool_image.cfm?id=131087&gallery=site&id_site=1402

Sites with commercial relations with the Ancient City of Qalhat

Port city of Banbhore (Pakistan)

Banbhore is an ancient port located on the northern bank of the Ghara Creek, ca. 65 km far from the city of Karachi. The port dates back to 1st AD century to the Scytho-Parthian era and remained active till the 13th AD century, when it was gradually abandoned after the change of the course of the Indus river.

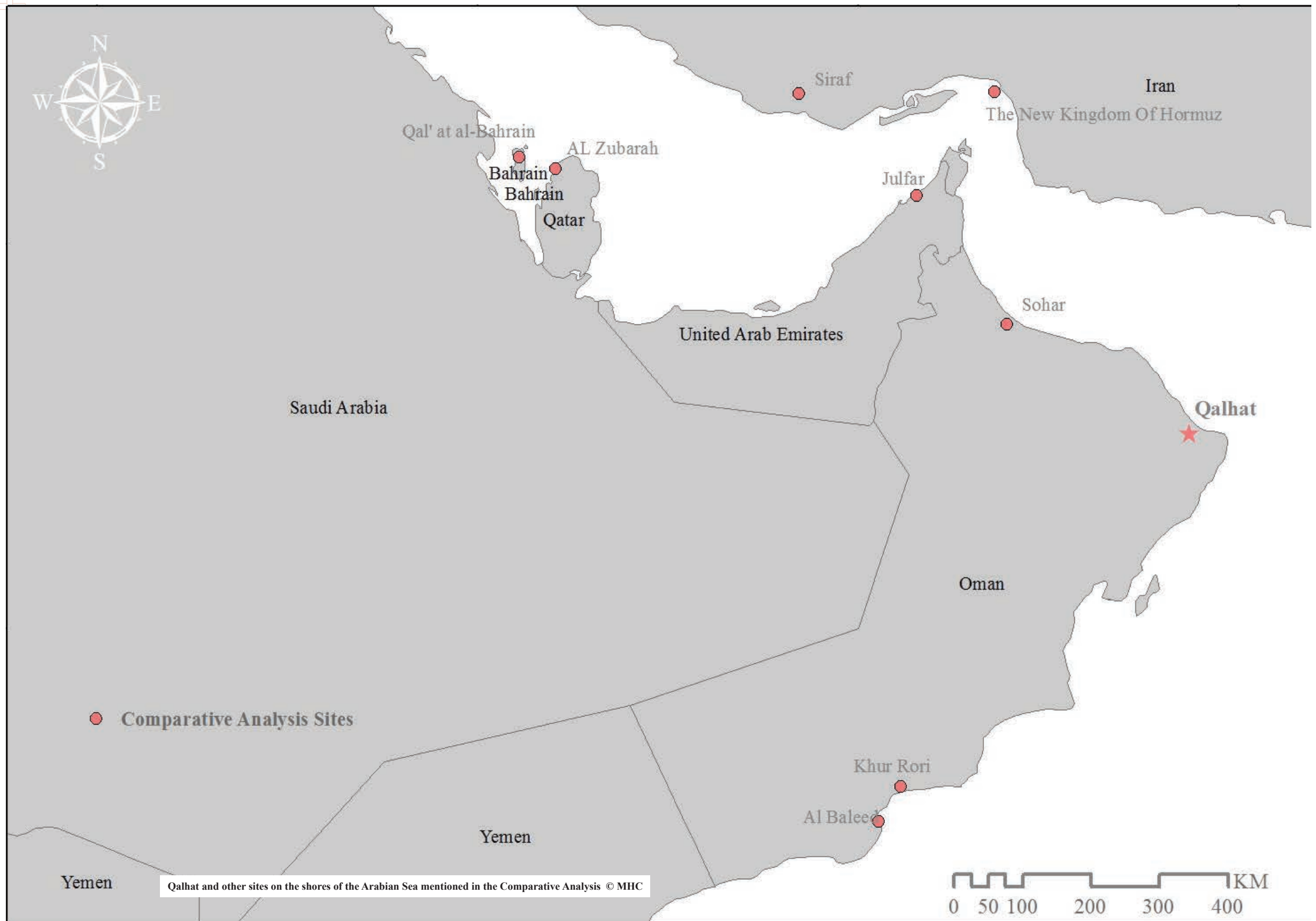


Aerial View of Banbhore fort © Google

The port city of Banbhore prospered from several industrial activities and different trading sectors, ceramic and metal goods were produced and imported. Banbhore was under the Islamic ruling from the 8th till the 13th century and, like Qalhat, it played a vital role in the trading exchanges across the Indian Ocean. Archaeological excavations revealed a city wall made of stones and mud and an impressive mosque inside the citadel, which – according to an inscription inside the mosque – dates back to 727 AD. It therefore considered one of the earliest mosques in the region. Remains of houses, streets and other building were also found inside the citadel and also outside. Both Qalhat and Banbhore represent important medieval port cities during the Islamic period.

Kilwa Kisiwani (Tanzania) (WHS)

Kilwa Kisiwani is an island port city in the Kilwa archipelago along the Swahili Coast. The site dates back to the 9th AD century and it prospered between the 13th and 14th



centuries AD, when it was the heart of the Kilwa Sultanate. Kilwa Kisiwani flourished through the control of the Indian Ocean trade with Arabia, India and China. Gold and ivory were traded along with silver, perfumes, Chinese porcelain, Persian faience and other precious goods. It was visited by Ibn Battuta in 1331-1332, who described it as one of the most beautiful cities he ever visited. Kilwa Kisiwani had many spectacular buildings and structures and the remains on site testify today to its prominence.



Kilwa Kisiwani © UNESCO
http://whc.unesco.org/include/tool_image.cfm?id=108287&gallery=site&id_site=144

The remains include the great mosque, which was built in the 11th century and enlarged in the 13th AD century, the palace Husuni Kubwa (1310-1333 AD), Husuni Ndogo, numerous mosques, and the ruins of the Portuguese fort, plus a well-preserved urban complex of houses, streets and public squares. Kilwa Kisiwani and Qalhat flourishing port cities in the same trading network and major political centers for the respective kingdoms. Kilwa Kisiwani a unique representation of the Kilwa Sultanate, as Qalhat is the only remaining witness to the great kingdom of Hormuz. They are both manifestations to different contemporaneous and neighbouring civilizations. Comparative studies of Kilwa Kisiwani and Qalhat will allow a better understanding of the trade routes and exchange activities between the Arabian Peninsula and East Africa, and on the urban planning

of different port cities in the Islamic periods.

3.c. Proposed Statement of Outstanding Universal Value

3.c.1. Brief Synthesis

Until the Portuguese attacked it in 1508, Qalhat was one of the most significant Islamic port cities for maritime trading in the Gulf region towards India and East Asia from the 11th and the 16th AD century. Today, Qalhat is an archaeological site with exceptionally preserved buildings, such as the Bibi Maryam mausoleum, which is still standing and functions as an important landmark. Qalhat is a unique testimony of the greatness of the kingdom of Hormuz. When the kingdom was founded, Qalhat was its second capital after the city of Hormuz on the Iranian side of the strait. Along with Hormuz, Qalhat controlled the kingdom's political, commercial and administrative affairs. Qalhat is now the most comprehensive witness of this kingdom, with all the city's components preserved on site as the city was just abandoned. Qalhat remained the only outstanding and monumental representation of the kingdom of Hormuz, since both the old and new cities of Hormuz have been completely destroyed by the infrastructural development and are there are no longer preserved as archaeological sites for both research and tourism. With the exception of Qalhat, all what is left from the kingdom's heritage are a few scattered monuments in cities that once were part of it. Qalhat is, therefore, the only opportunity to bring alive the extraordinary heritage and legacy of the kingdom of Hormuz, as it is clearly proven by the town planning, by and the design of its magnificent buildings, which have recently been scientifically brought to light and carefully restored, and by the richness and diversity of its material culture.

Moreover, Qalhat itself represents an outstanding example of a port city dating back to the Middle Ages, where important exchange of goods and traditions took place. It was very famous for its horse trading, authentic Arab horses were exported from Qalhat's valleys through its port to

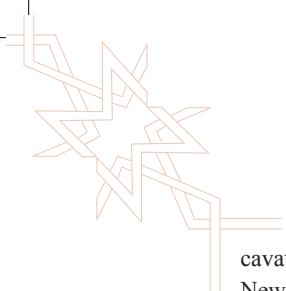
as far as India, and it has also played a prominent role in the trading of other valuable goods like pearls, dates and incense. It was significant enough to be visited and documented by two of the greatest explorers in history, Marco Polo and Ibn Battuta. Its importance and significance as a port is reflected also by the artefacts collected from both archaeological excavations and underwater surveys, which revealed the largest collection of Indo-Arabian stone anchors in the world. Further archaeological research will further expand our direct understanding of what is mentioned in ancient texts about the important commercial and cultural relations with India and the Far East.

The fact that site was completely abandoned after its destruction and the absence of later re-uses make Qalhat particularly valuable for archaeological research on urban planning. This exceptional situation will allow a detailed understanding of the daily activities that occurred at site – and their development through time – and of the town planning of an Arab medieval port city. The traces of aligned coral stone walls, remains of houses, streets and squares and the several thousand or artefacts retrieved and recorded can be interpreted in high detail and provide a unique framework for the several outstanding building of the city, such as the Friday mosque, the hammam and the Bibi Maryam mausoleum.

3.c.2. Justification for Criteria under which this Inscription is Proposed

Criterion (iii): bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared

The site presents a unique evidence to reconstruct different aspects of the Kingdom of Hormuz, which prospered from the 11th to 16th AD century, including the contribution of its Arabic components to the greatness of its accomplishments. In fact, the Ancient City of Qalhat played a significant role in the development of the Kingdom of Hormuz thanks to its strategic position on the eastern coast of Oman. The planning of the town and the buildings ex-



cavated amongst the ruins show great similarities with the New City of Hormuz in Iran, which no longer exists. Moreover, Qalhat has preserved unique buildings that are fundamental for the study and reconstruction of the development of Islamic architecture. In fact, several other buildings, which were structurally and stylistically connected to those still standing at Qalhat, are now destroyed and cannot be longer studies or visited.

The fact that the site has been totally abandoned since the middle of the 16th AD century and that no modern settlement has disturbed the site make this property of great value of archaeological research in this part of the world on the period between the 5th AH / 11th and 10th AH / 16th AD century. The archaeological site has a great potential and will allow understanding more about the ways of life in medieval Arabia and confirming the importance of the international exchanges as described by the contemporaneous visitors such as Ibn Battuta, Marco Polo and many others.

Criterion (v): an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change

The Ancient City of Qalhat is an outstanding example of a traditional town development and building techniques answering the constraints of the local environment. Its location among the mountains, the deep wadi and the sea was certainly a strategical choice, since it ensured protection from all sides. The local environment of Qalhat was harsh. There was little access to fertile plains or valleys. The survival of the population was based mainly on fishing, date-palm cultivation or importations from the inland or from abroad. The long preservation of staple commodities was essential; therefore, traditional techniques such as the drying of fish or the preservation of dates were certainly used in Qalhat, not only for local use but also for exportation. Qalhat was also a production center for pottery and

metal items. The detailed study of the pottery production has shown that the containers were of a very high quality and that they were exported to Hormuz and to India and the Far East. The urban planning shows the presence of different quarters, some of which were fortified, defined by their use (religious, economic, residential, etc.) and correspond to what was known about the City of Hormuz. The base material used for construction was mainly coral rock obtained from the reefs in front of the city. The use of this easily available material for buildings that provided the necessary air flowing and lightness, but it eventually signed the doom of the city when a fatal earthquake struck it: it is in fact much less stable than rocks and bricks.

Criterion (vi): directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance
Since the Pre-Islamic period and until the Middle Age, Qalhat was directly associated with great events of outstanding universal significance. The first of these outstanding events is related to a semi-legendary tradition reflecting a long trail of 'Azd migrations from Southwestern Arabia to Oman and Iran, which started well before the Christian Era and continued until the Islamic period. The legend implies the foundation of Qalhat as an important site linked to the emergence of the first Arabian state in Oman.

The second event corresponds to the rise and fall of the Hormuz Kingdom in Persia. Qalhat had always shared strong links with Hormuz since its foundation. It became formally part of the Hormuzi kingdom in the 7th AH / 13th AD century with the name of Dar Al-Fath (Land of Conquest). Thanks to its protected geographical position, the city developed as an important harbor, from which families of ousted Hormuzi kings and pretenders to the throne passed long sojourns, waiting for their turn to reign. However, it was above all one of the major mercantile ports, from which the Hormuzi controlled most of the navigation across the Sea of Oman and the Arab Gulf and developed

important networks extending to India and East Asia in particular.

The third outstanding element in relation to Qalhat is its importance as a mercantile exchange center on the Sea of Oman with outreach towards the Indian Ocean, of which not only certain architectural elements are proof of, but also more and more archaeological data. Contemporaneous historians, geographers and travelers from different origins described all of these events. It will be quite difficult to distinguish between those stories written by these authors from the authentic reality of the archaeological site.

3.c.3. Statement of Integrity

The Ancient City of Qalhat covers all chosen attributes corresponding to the above defined criteria.

The ruins of Qalhat are fully preserved under the rubble caused by an earthquake and by the Portuguese attack at the beginning of the 16th AD century. The site has never been re-occupied since then. The geophysical survey detected evidence for the existence of more than 2800 houses organized in well-planned quarters. Some of the buildings have been excavated and show similarities with those of the first capital of the Kingdom of Hormuz, which is now totally destroyed. The city includes important elements corresponding to an up most important Islamic town such as the Friday Mosque, which could certainly be seen from far away on the sea, the Bibi Maryam mausoleum as an outstanding example of funerary architecture, the hammam near the entrance of the town and many entrapped buildings showing the importance of this port. The array of finds, including wares from as far away as China or Southeast Asia, confirm the international importance of this city in the Islamic Middle Ages. The material used for the constructions was entirely local, showing a great dexterity of applying regional materials for the construction of mighty monuments. Historical documents and stories told by historians, travelers and geographers are confirmed by the discoveries made by the archaeologists on the site. Qalhat



Ancient City of Qalhat. Aerial view © MHC, 2015

has just started to reveal many of its historical treasures. The property includes the whole of the Ancient city of Qalhat, with the southern part which was used as an entrapped and for the gathering of goods (amongst them horses), ensuring a representation of the medieval city and its function as an administrative and economic center in its whole. The buffer zone includes further elements linked to the protection of the city.

The site is an archaeological site under protection of the Government of Oman, which safeguards it from development pressure. The small village of the modern Qalhat is situated on the other side of Wadi Hilm and cannot extend to the south. The Qalhat Development Project started in October 2012 and will end in 2017, ensures a development process including excavation, conservation and a tourism development plan for the site. The application of the final draft management plan will ensure that the integrity of the site is maintained and archaeological excavations take place, the information will duly be gathered, archived and the knowledge distributed for the population.

3.c.4. Statement of Authenticity

Once again, the destruction of the Ancient City of Qalhat plays a positive role in the conservation of its authenticity because the site has never been re-occupied since its abandonment. The structures and the artefacts are therefore preserved in all their characteristics and spatial arrangement, organization, function and particular architectural techniques corresponding to the Islamic Period in general and the period of the Hormuz Kingdom in particular. The “frozen” spatial organization of Qalhat offers the best relicts of the social and economic urban planning in the early medieval cities on the Arabian Sea. Moreover, the use of traditional building materials and in particular coral stones is of utmost importance since it is proof of relations with the Kingdom of Hormuz. These materials are still in use for the conservation and restoration of the excavated buildings in Qalhat. The excavation programme includes the investigation of several important public buildings of the medieval town, such as the Mosque

and the hammam, but also of important commercial and private structures and aspects of the material culture, like the pottery atelier and the so-called twin houses. This allows gaining important information, which will integrate in the long-term management for public access. The location of Qalhat between the mountains, deep valleys and the sea is untouched by modern constructions, although the modern highway passes just behind the site. The site constitutes an integral part of the memory and tradition of the people for its archaeological significance and its international history but also in its attachment to local values. Moreover, the traditions particularly in relation with the Bibi Maryam mausoleum are still alive amongst the local population, as is testified in the local dialects and customs.



Archaeological excavations of House B92 view from the North-western Quarter © MHC, 2011

Section 4

State of Conservation and Factors Affecting the Property

4.a. The Qalhat Project and Qalhat Development Project, Research and Results¹

Qalhat is one of the most famous and impressive archaeological sites of Oman, and is known from several medieval literary sources which enhance its key importance in the history of Oman and the Indian Ocean trade, especially at the time of the Hormuz kingdom (13th-15th centuries AD). Due to its huge size the site was nevertheless little studied, until the Ministry of Heritage and Culture (MHC) of the Sultanate started in 2008 a comprehensive study project, the Qalhat Project (QP), in cooperation with a French team directed by Dr. Axelle Rougeulle from the French National Centre for Scientific Research (CNRS-UMR8167). Five excavation seasons were first conducted from 2008 to 2012, which delivered much interesting information about the history of the city, its spatial organization and development, the daily life of the inhabitants and their activities, the regional and international trade networks of the harbour. A cartographical project was carried out, which achieved a GIS and preliminary maps of the medieval city, the various quarters, architectural units, main buildings and circulation networks. The defensive system, water supply system, and the funerary quarters, were studied. The Friday Mosque and some secondary mosques, a ceramic factory and several large buildings as houses and

¹ Rougeulle 2015/6: 9-36.



Excavated Buildings B21 and B94 under restoration in Feb 2014 © MHC

stores, were discovered and tested. A detailed study of the archaeological material, and especially of the local and imported ceramics, was undertaken, which allowed the identification of the main commercial partners of the harbour during the pre-Hormuzi and Hormuzi periods.

Consequently, the MHC launched in January 2013 a new five-year project, with the final aim to create an archaeological park at the site. The Qalhat Development Project (QDP) is led and fully funded by the MHC. It runs in seasons of about five months from October to March, with two sessions, fall and winter, separated by a one-month break during the Christmas/New Year period. Its aim is to excavate and clear extensively some of the main buildings discovered in the course of the QDP, then to make conservation works for their display to the public in the future park. It therefore includes an excavation component, achieved by the CNRS and the archaeological agency Eveha International; a conservation component, realized by World Monuments Fund; and a tourist development component, which has still to be initiated.

Research conducted during the first half-season 2013a of the QDP (January-March 2013) focused on the northwest quarter of the city. Several buildings previously tested by the QP were then entirely cleared, a funerary mosque (B67), a twin house (B94), a large store (B21) and a small platform mosque (B19), which were later conserved by the WMF. They brought quite a lot of information on the religious, domestic and economic life of the inhabitants of Qalhat, as on the chronological evolution of the city.

The full following season 2013b-2014a (October-December 2013 and January-March 2014) was entirely devoted to the comprehensive excavation of the Great Mosque of the city, which was built by Bibi Maryam around 1300 and destroyed by the Portuguese in 1508. The surrounding walls of this wide architectural complex on the seashore include two wide courtyards and several secondary structures, beside the mosque proper. Although largely destroyed, this one appeared as a unique edifice in the architectural history of Oman and of the Islamic world:

an extremely complex construction with two stores, the prayer hall erected on top of a massive basement with underground cellars, and heavily ornamented with varied decoration styles depending on the area in the building. Excavations and registration had therefore to be very precise and detailed to allow a final Icomen restitution of the original building, and the remaining work planned for the following season 2014b-2015a.



The Great Mosque under excavations in February 2014 © MHC

4.a.1. Completion of Excavations at the Great Mosque Complex (Buildings B12, B15, and B139) and its Surroundings (Buildings B197 and B255)

Results after the QDP excavations, 2008-2011

At the beginning of the first excavations led by the Qalhat Development Project at the Great Mosque (B12), in October 2013, the main general features of the building were already known thanks to the previous soundings opened by the Qalhat Project between 2008 and 2011. The B12 Complex as a whole is more or less square, 60 m long west-east and 50 m wide north-south, bounded to the east by the seashore, to the south and west by streets, and to the north by the large building B13.

The Mosque properly said is located in the south-east corner of the Complex and the QP soundings uncovered

a square building, 25 m long east-west and 26 m north-south, variously preserved. A long trench opened in the axis of the building also found the mihrab and the minbar and revealed that the mosque was built on two levels, with the prayer hall on the first floor. The ground floor, which was identified as a basement, was assumed to be divided into six spans by north-south walls, parallel to the shore and qibla wall, which were divided into compartments by shear walls. The easternmost four spans (1 to 4) were packed by the collapse of the prayer hall, when the two westernmost spans (5 and 6) were filled by a backfill. It was so assumed that the westerly spans were never accessible, while the easterly ones, or at least some compartments, were originally empty and probably accessible, as cellars. The prayer hall itself was nearly entirely destroyed and washed by erosion, except to the west, on top of the backfilled spans 5 and 6. Only one-meter-high of the qibla wall was preserved, together with the bases of the pillars of the westernmost row, founded on top of the basement wall between the two spans.

QDP excavations also revealed that the mosque was bounded to the west/north-west and north by two courtyards set at different levels, which were separated by a high retaining wall built in the same alignment than the basement inner wall between spans 4 and 5. The north low courtyard (B12-LC) was at the level of the bedrock, on the shore on top of the beach, when the north-west/west high courtyard (B12-D and HC) was about 3 to 4m higher. The soundings opened in the north courtyard revealed a row of rooms set alongside the northern façade of the basement, with the base of a minaret at the eastern extremity, near the shore. One of the main questions which arose during the QP excavations was the location of the entrance to the prayer hall on the first floor, the most probable location of the gate being in the north wall, up the roof of the northern wing of rooms. But no trace of it was discovered at that time in the excavated areas, and the access to this gate, from the north low and/or west high courtyards, was difficult to understand.

A small building (B95) was also partially uncovered in the north-west corner of the Complex, in the high courtyard. Between this construction and the large building B13 to the north was a narrow passageway, which was interpreted as probably the main entrance to the Mosque Complex from the city.

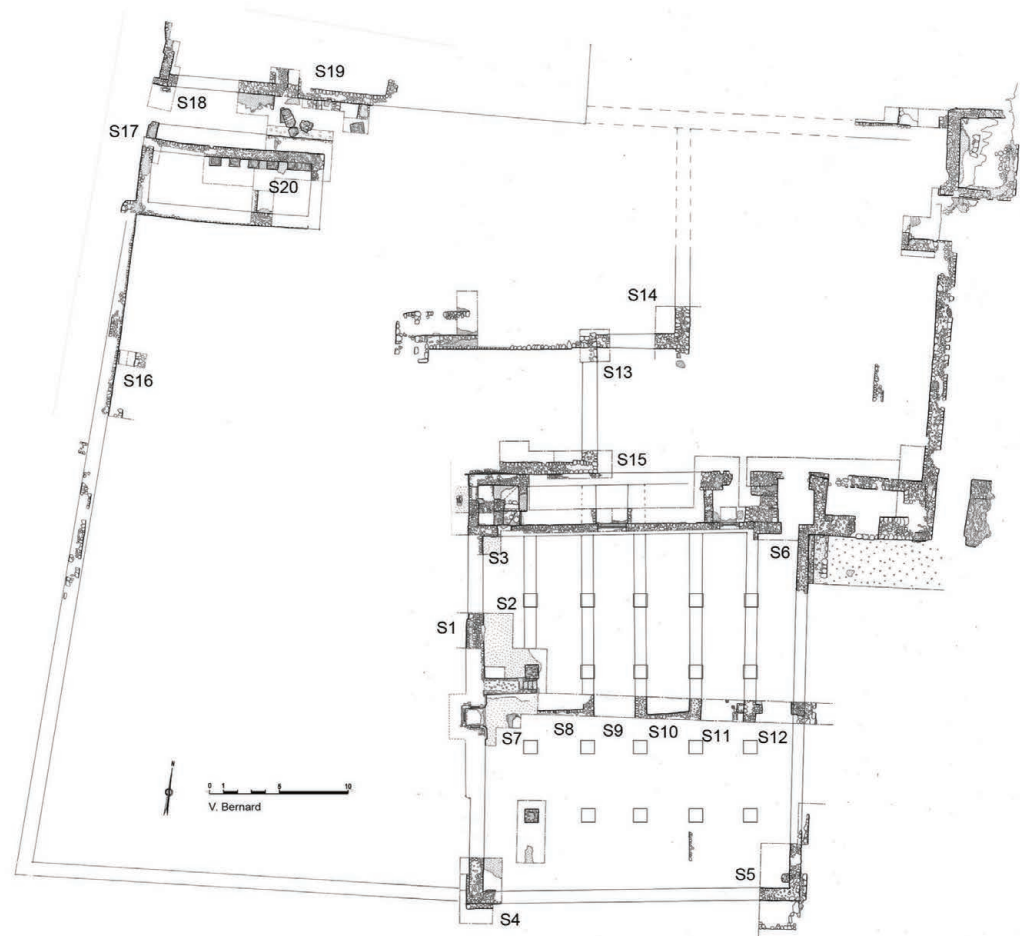
Results after the first QDP season of excavations at the Great Mosque, 2013b-2014a

After the end of the first season of the Qalhat Development Project devoted to the comprehensive excavations of the Mosque Complex, between October 2013 and March 2014, the plan, general organization, and original appearance of the building were highly documented. Especially, an important study was initiated on the decorative and architectural remains found in the collapse levels, in order to find a way to be able to restore the original aspect of the Mosque, its architecture and internal ornamentation. The excavation focused mainly on the basement, the north aisle and the building B95 with the nearby entrance.

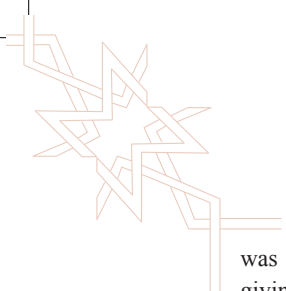
I-A2a. The basement 21

The first main information was the confirmation that the four eastern spans of the basement were fully occupied by several accessible rooms (all alphabetically named), a quite unusual feature. This part of the basement was divided in two halves with no communication in-between. To the east, the northern part of the two eastern spans (1-2) only was excavated, because of insufficient workforce. Four rooms were variously cleared in this area. The two northernmost ones (B12-H in span 1 and B12-G in span 2) were reachable from the northern low courtyard through two rooms in the north wing. South of them were a room (B12-K in span 1), accessible from the beach, and its back-room (B12-Q in span 2). Other rooms were at that time only partially observed to the south (B12-L, R, S and V), the ones in span 2 seemingly accessible through rooms in span 1.

To the west, spans 3 and 4 were nearly entirely cleared, except for the southern extremity. The spatial organization



The Great Mosque B12 at the end of the QP soundings © MHC



was totally different: a long corridor in span 4 (B12-B), giving access to four rooms in span 3 (B12-A, C, I and F). The corridor was lined to the west by a long north-south uninterrupted wall which retained the backfills of the western spans 5 and 6. Though not completely cleared at that time, it was obvious that it was crossing the entire basement, from the southern street to the northern low courtyard, and could so be interpreted as a covered street. All the walls were covered by a beige coating, more or less preserved. Where the coating was missing, it was observed that the walls were all built on the same way, with a mix of large pebbles and limestone blocks becoming smaller as the wall is rising. The corals blocks were less numerous but becoming more present in the upper part. This choice was undoubtedly ordered to make strong foundations and lighter elevation.

All the excavated rooms of the basement had also a coated floor, similar to the coating of the walls, sometimes very well-preserved, sometimes highly damaged. Cracks were observed almost everywhere, especially at the junction between the coating of the floors and the coating of the walls, suggesting that the underneath backfill has known a subsidence leading to a slight drop. Only in one room was observed an underneath and former floor, also made of coating, but as it was chosen not to go under the preserved floor for reasons of conservation, there is a possibility that the same kind of repairing also occurred elsewhere in the basement.

Nearly in every room, except in the long corridor B, the coated floors were covered by a layer made of small pebbles, presumably coming from the beach. The ceramics found in those levels suggest a setting around 1500A.D. It is quite likely that levels of pebbles were used as a sanitary floor which infiltrated the rubbish, frequently removed when too dirty and replaced with new clean levels of pebbles. In this assumption, the discovered levels of pebbles would have been the last ones to be set before the arrival of the Portuguese invaders and the abandonment of the Mosque. Though it is quite possible that the coating of the

whole basement was also lately renovated, there is no reason to doubt that this feature dates back to the foundation of the Mosque by Bibi Maryam around 1300.

I-A2b. The prayer hall

Except for its western part along the qibla wall where the superstructure is preserved 1m high on top of the two backfilled spans 5 and 6, the prayer hall is known only from the study of the collapsed fragments trapped in the basement's rooms. The presence of fragments of walls at the foot of the long wall between span 2 and span 3, and the decorative and architectural features visible on some of them, clearly state that this wall was originally rising over the first floor, up to the roof. The first floor was so divided in two unequal parts by a wall, built over the long wall of the basement, which was pierced with several gates and decorated by niches. The biggest part, occupying the western two-third over spans 3 to 6 and containing the mihrab and the minbar, was undoubtedly used as the main prayer hall. The smaller part, occupying the eastern one-third over spans 1 and 2, can either be seen as a secondary prayer hall or as an entrance hall towards the sea.

According to the architectural and decorative elements found in the collapse, the prayer hall was divided into four naves by three rows of columns bearing north-south oriented ranges of arcades, parallel to the qibla wall, all different in shape and style. Combinations of carved stones and tiles also created a variety of decoration, particular to each part of the prayer hall, and the precise methodology put in place in the beginning of excavations allows the convenient restitution of this decoration. In the middle of the span 4, in front of the mihrab, various elements showed that four massive columns were bearing a vaulted cupola protruding from the roof. Well preserved remains of the four columns were found, with their elaborated decoration, as well as remains, less-preserved, of the spandrels and arches. Remains of the cupola itself were scarce but it was possible to consider an octagonal tambour surmounted by a row of narrow windows and a hemispherical

fan vault.

The decoration of this part seemed to be the most elaborate in the prayer hall. The cubic basis and the two circular drums of the columns were decorated by a combination of beige limestone blocks cut into hexagons and inlays of four-pointed stars made of molded plaster and pieces of glazed tiles. The spandrels and arches in the upper part were mainly covered by panels made of molded plaster and small pieces of glazed tiles and ceramics, with small limestone blocks carved into quatrefoils on the intrados and edges. In the north and south of the prayer hall the decoration became simpler, the bases and drums of the pillars being only made of rectangular carved stones without decoration. In the entrance hall either, only fallen remains of pillars with a cubic basis and octagonal columns were found but no remains of arches and much less elements of decoration, suggesting a different treatment and a rather simple ornamentation, mainly made of plaster moldings. Here the roof was probably only supported by beams lying on top of the columns.

I-A2c. The North wing

In the north wing, against the north façade of the basement, the long trench opened by the QP had revealed two rooms to the east, reachable from the low courtyard, and two other rooms to the west, apparently accessible from the high courtyard. Between those two areas, an open space from the low courtyard was assumed. Extensive excavations by the QDP confirmed this setting and refined it. The two eastern rooms (B12-T and W) were entirely cleared, down to a floor made of a coating different from the one in the basement, being grayer and stronger because using more mortar. They are the only accesses to the north rooms of spans 1 and 2 in the basement (B12-G and H). Fragments of a decorated cupola were found in the collapse, which suggest that a porch could have been located on top of the easternmost room G, against the minaret, probably a gate to the entrance room of the mosque. Thus, the rooms were covered by a terrace, which was acces-

sible through the staircase discovered against the east wall of the courtyard along the beach, or/and straight from the high courtyard.

To the west of the north wing, against spans 6 and 5 of the basement, a staircase (B12-I) leading from the upper courtyard to a closed room (B12-J) at the level of the low courtyard had been partly excavated by the QP. Further excavations by the QDP uncovered basins with waterproof coating and other settings suggesting the use for ablutions. A partly closed room (B12-P) was also excavated right to the east, separated from the low courtyard by a small wall around 1m high. A large pit full of gravels was found there, probably for a slow infiltration of the water coming from the room B12-J by a gutter running under the base of the separating wall.

The middle part of the north wing, between the two groups of rooms to the east (B12-T and W) and west (B12-I, J and P) turned to be an area opened to the low courtyard, and not a continuous range of rooms, as it was firstly assumed. A staircase (B12-N), with two flights of stairs, was uncovered to the east, against span 3 of the basement, built in the corner of the basement and the room B12-W. The stairs are covered with a strong black mortar, which was also observed in some other parts of the façade of the north wing, but nowhere inside the building. A sounding opened inside the staircase revealed that it was built against the coating of the façade of the Mosque, and the ceramics found inside the backfill under the steps suggest a construction dating to the middle of the 15th AD century, at the earliest. This stair was leading to the terrace on top of the north wing, in front of the main gate to the prayer hall, but it appeared to be a later addition, probably when the assumed terrace covering the low courtyard was partially or completely damaged. At the end of the 2013-2014 season, excavations were not finished in the area west of the staircase, in front of the long corridor of the basement (B12-B).

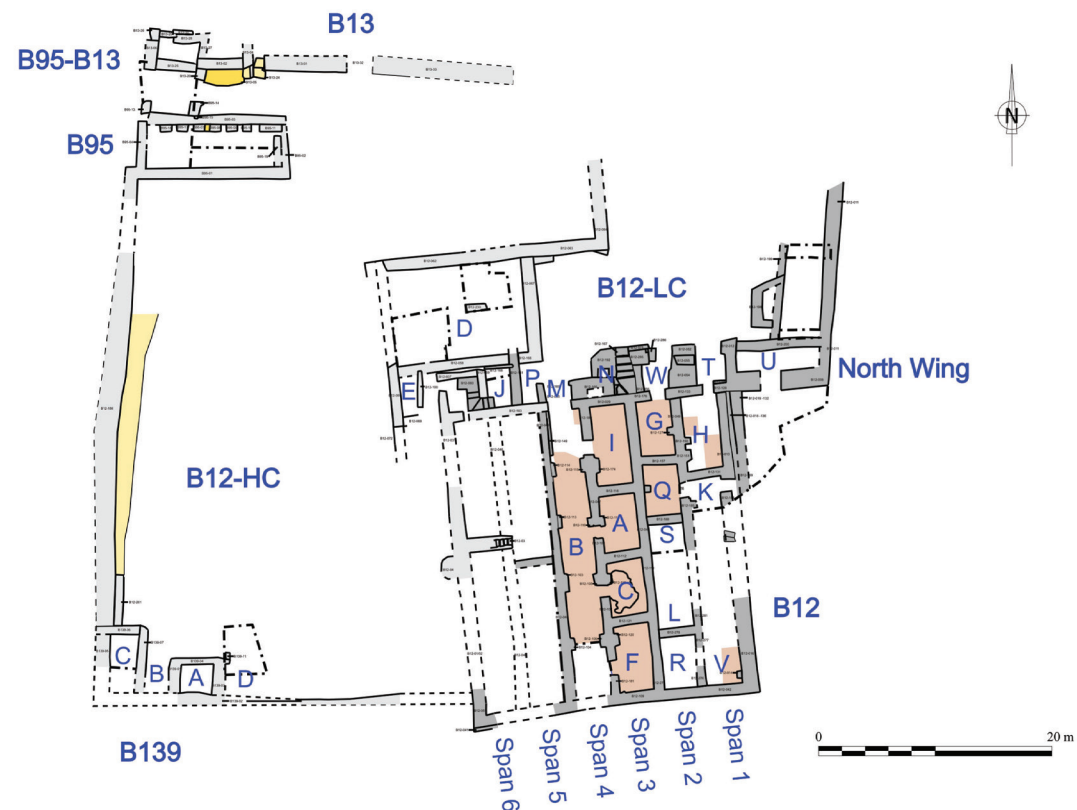
I-A2d. The secondary structures

In the north-west corner of the Complex, the building

B95 and the passageway nearby (B95-B13) which is the main access to the Complex from the city, was nearly entirely excavated during the 2013b-2014a season. Damaged benches and a possible street-walk were found in the passageway reducing the width of the access to a narrow space, allowing place for only two peoples walking abreast. Access to the northern building B13 were also uncovered but only partially excavated. The building B95 is a long rectangular building, with a row of seven pillars against the northern wall, creating niches probably used for shelves.

Those shelves firstly led to interpreted the building as a

possible madrasa (the shelves being there used to store books), but the feature of shelves in niches is so common in Omani architecture that the building could have any function, possibly a store for the furniture of the mosque. No openings, such as doors or windows, were found at that time and the door was probably located in the east wall, now very badly preserved. In the south-west corner of the Complex, heaps of collapse strongly suggested that several rooms were to be found here. The excavations of the 2013-2014 season revealed two rooms (B139-A and C), separated by a small open space (B13-B). Observations showed several stages of construction but the use of



The Great Mosque B12 at the end of the 2013-2014 season © MHC

the rooms remained unexplained. Finally, the internal face of the enclosing walls west and south of the high courtyard were also unearthed in their nearly entire length, except for the area near the southwest corner of the mosque, along the south street which was also partially uncovered.

During this first season of excavations at the Mosque, a long time was also devoted during the fieldwork as well as during the preparation of the final report in France, to put in place a convenient protocol for the study of the decoration, the identification of the different styles used, and the mathematical statistics which will allow a restitution of the Great Mosque of Bibi Maryam from the number of fragments of decoration and architecture (tiles, carved stone, etc.) found in the collapse.

B. The 2015b-2016a season - 1. Excavations of the south-east part of the Mosque (Spans 1 and 2)

All the area of the south-east quarter of the basement was only partially unearthed during the 2013b-2014a season, only the top of the walls being uncovered. It was fully excavated till the floor during the Fall session of the 2015b-2016a season, under the supervision of Romain Séguier.

I-B1. Room K (Span 1)

At the beginning of excavations, in October 2015, only a small part of the room was already unearthed: to the north was the long axial trench opened by the QP, and another sounding had also been opened by the QP to the south, at the south-east corner of the building. As it was thought that the uncovered part of the span would have probably been divided into several rooms, by east-west walls more or less in the same alignment than the walls of the westerly spans, the northern part of the area was named room B12-K and the southern part B12-V. However, no dividing walls were found and the span revealed to be occupied only by two rooms: the room B12-H to the north, occupying one-third of the span and already excavated in the previous season; and the room B12-K/V (hereafter called only B12-K) to the south, occupying the remaining two-third. The rooms

Qalhât (Ash-Sharqyah - Sultanate of Oman), The Complex of the Great Mosque, site plan



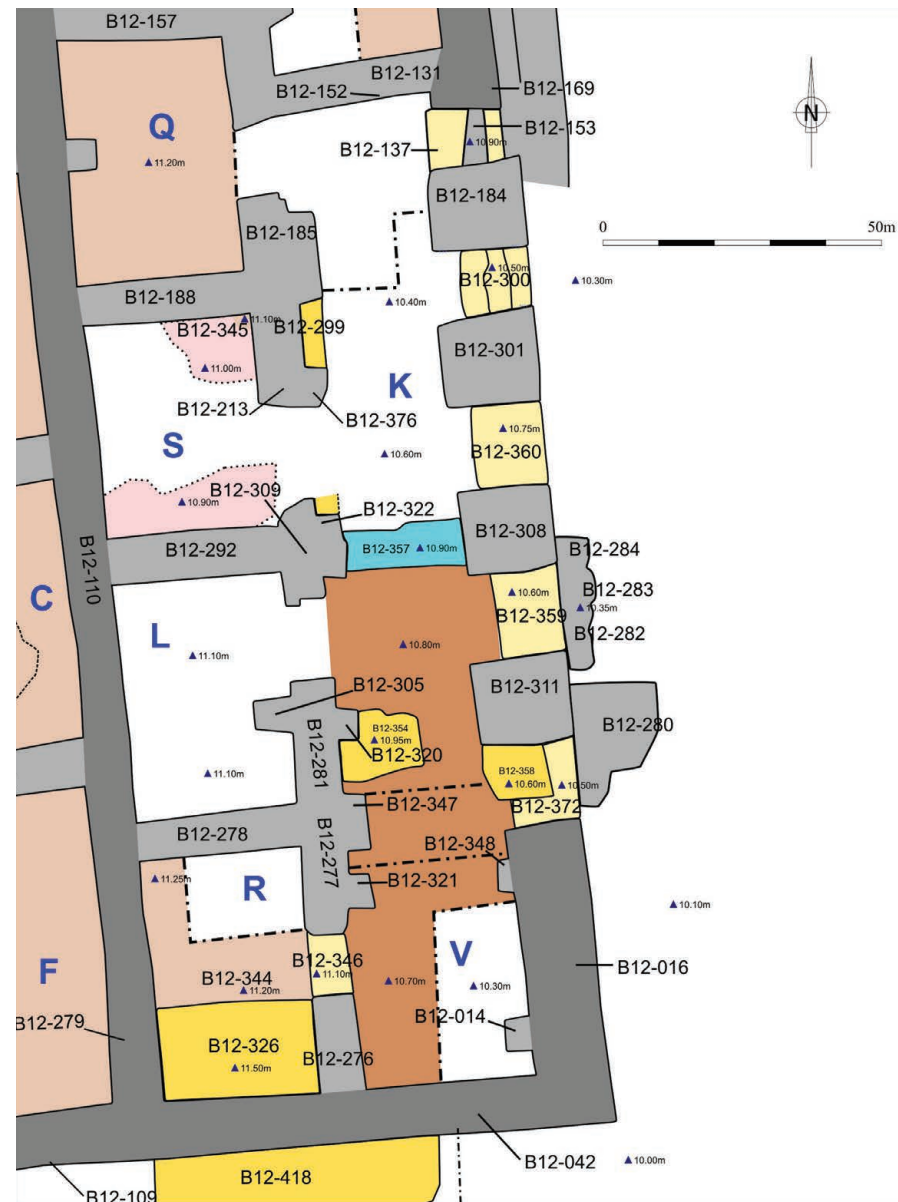
12K is therefore 17.60m long (north-south) and 2.25m wide in average (east-west), the surface area being around 45m², making the room B12-K the largest one of the basement, except for the corridor B12-B. The room was accessible from the beach by five nearly contiguous openings, and it gave access to four rooms in the western span 2 (B12-Q, S, L and R from north to south).

As the northern part of the room, where stands the access to room B12-Q and the threshold B12-137-153 that give access from the beach, was already excavated during the 2013b-2014a season, its description was made in the previous report and will not be repeated here.

I-B1a. Architectural description

The room B12-K is bordered to the west by a series of walls which separate the room K from the westerly rooms in span 2. To the north, the walls B12-309 and B12-281, on both sides of the gate giving access to room B12-L, are the delimitation between the two rooms. To the south, the walls B12-277 and B12-276 make the separation between room K and room S, both being separated by the gate that give access to this room. All those walls and their accesses will be better described below, with the description of the span 2, but it can be said that those walls are made in the traditional way, with a double facing of medium pebbles and limestone blocks, with corals in the upper part, and bounded with a pale gray mortar. The walls are covered by a beige coating which is variously preserved, showing some important gaps, but there is no doubt that they were originally entirely coated. All walls are strengthened by buttresses, some of them being used as foundation for the above pillars in first floor, but others seem to have no architectural use and could have only be used for internal fittings, such as shelves.

The buttress B12-322 is built against the wall B12-309, in the alignment of the wall B12-292 that separates the room B12-L and B12-S. It is preserved up to a maximal height of 1m and measures 1.10m long by 0.45m wide at its base. It is made with medium corals and limestone blocks, with



Site plan and altitude of the main structures of the south-east part of the basement © MHC

bigger stones at the angles, and bounded with a rough gray mortar with inclusions of charcoal and small pebbles. It seems that this buttress was extended to the north for about 0.50m to give its actual size. The size and location clearly suggests that this buttress was made to support a pillar from the entrance hall in the first floor and the extension could be a later strengthening but could also dates back to the first stage of construction. In this hypothesis, the builders would have first made a too small buttress which had to be extended to support the weight of the pillar and roof above. This kind of construction's error was observed in other places of the basement. North of the buttress, a small horizontal projection of the coating might indicate that a bench once existed next to the gate to room B12-S, but the state of preservation is too bad to be affirmative.

To the south, the buttress B12-347 is built against the walls B12-277/281, in the alignment of the wall B12-278 which separates the room B12-L and B12-R. 1m long by 0.40m wide, its elevation is only preserved for around 1m high, the upper part having collapsed. It is built in the same way as buttress B12- 322, with medium corals and limestone blocks and bigger ones at the angles, bounded with a gray mortar and showing remains of coating. Its size and location also clearly indicate that it was bearing a pillar of the first floor. As a matter of fact, remains of the pillar were found at the foot of the buttress, with a cubic basis and two drums of the octagonal column that once supported the roof of the entrance hall. The collapsing of this pillar is undoubtedly the reason for the disappearing of the upper part of the buttress. The setting of the massive buttresses in this area is similar to the setting in the other parts of the basement, showing the location of the vanished pillars of the first floor and so drawing the plan of the prayer hall and entrance hall.

4.b. Present State of Conservation

Much of the architecture of the ancient city is buried under several meters of sediments, following collapse for natural disasters and erosion. Few architectural structures are

still prominent, such as Bibi Maryam, few small mausoleums, two cisterns and sections of the ramparts, while others were uncovered by archaeological excavations since 2003. The conservation works of the Qalhat Development Project allowed to analyze precisely the construction techniques used at the site and to assess pathologies and damage to the structures.

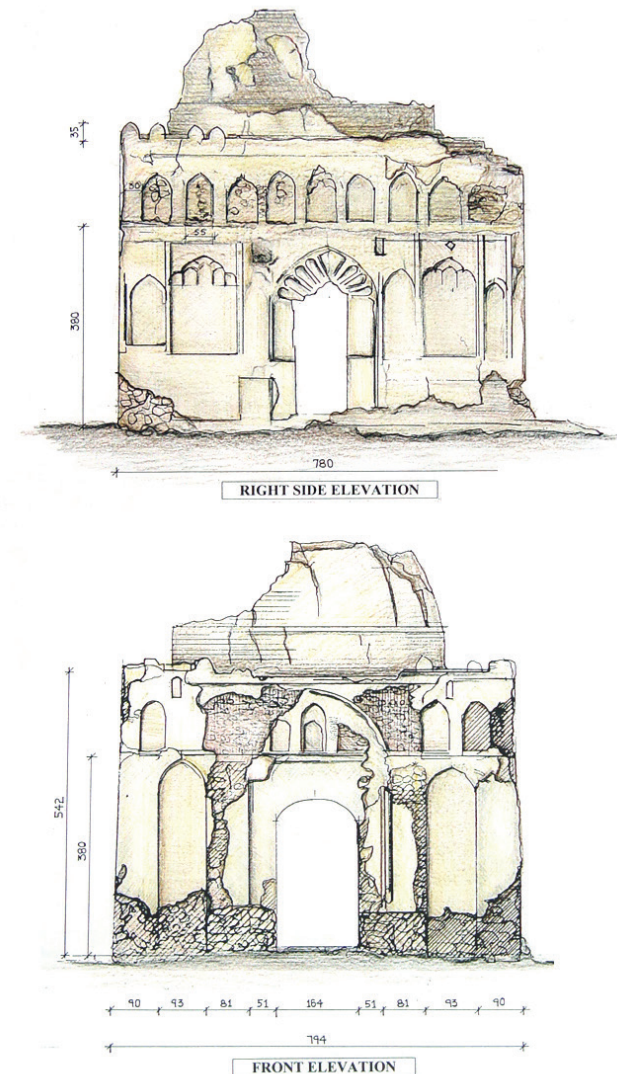
4.b.1 Preserved structures

Bibi Maryam

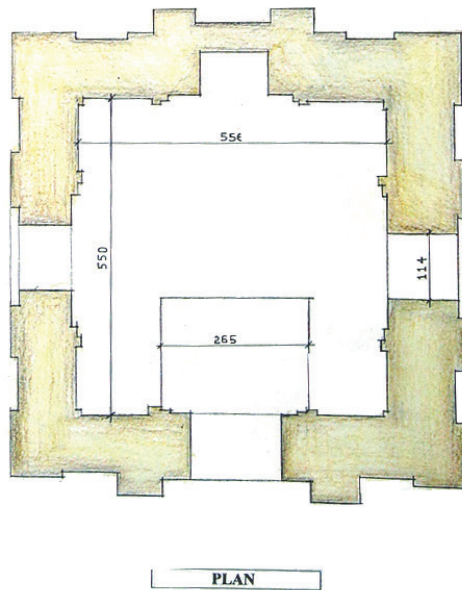
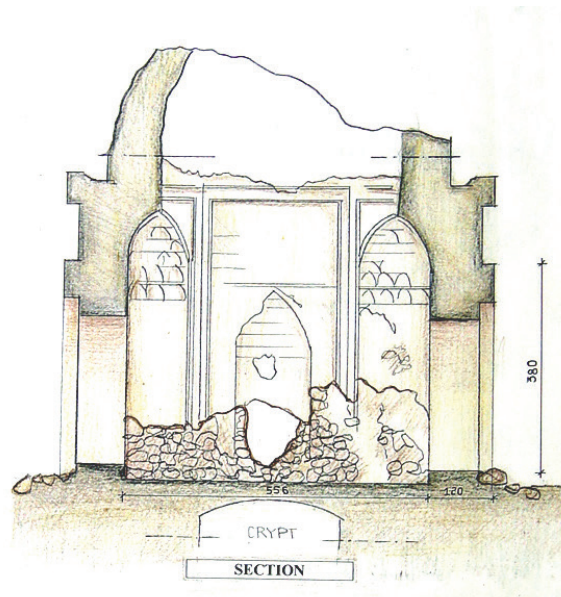
The mausoleum has a square base of c. 8 x 8 m and it is covered by a partly collapsed cupola on a drum. In 1835, Wellsted described its interior as 'covered with party-coloured glazed tiles, on which are inscribed, in relieve, sentences from the Koran' (Wellsted 1838, I: 41)². Nothing is left now of this decoration except for traces of a mosaic of plain blue glazed tiles in the shape of stars and crosses on the east jamb of the southern entrance (See Annex 3). On the walls, a first layer of plaster made of gypsum and earth and a second more resistant plaster that permitted to create various geometric decorations as the muqarnas are still visible.

Between 2005 and 2006, the MHC conducted conservation works to stabilize the masonry and to reinforce the dome with pins to recreate the cohesion of the structure. No hypothetical reconstructions or alterations were executed in respect of its authenticity and aesthetic value. The original plaster's layers were left intact and only consolidated where needed and it was generally chosen not to cover the walls with modern layers of gypsum. Metal grids were positioned at the doors and at the window to prevent access. Some nearby graves were also encircled by a small barrier and the area was closed on the east side by a fence.

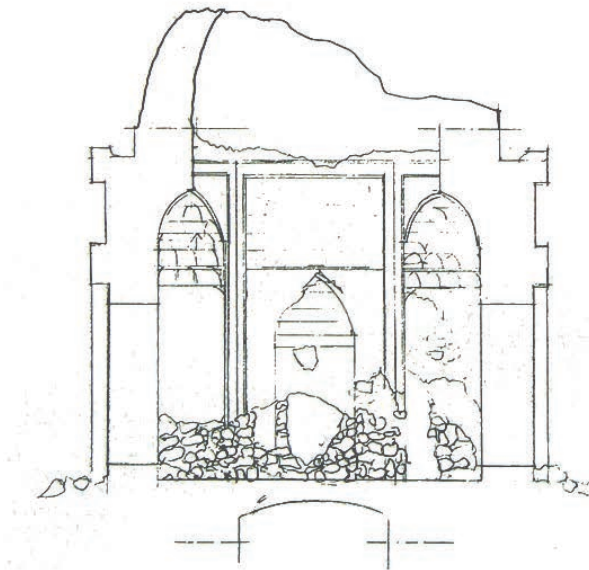
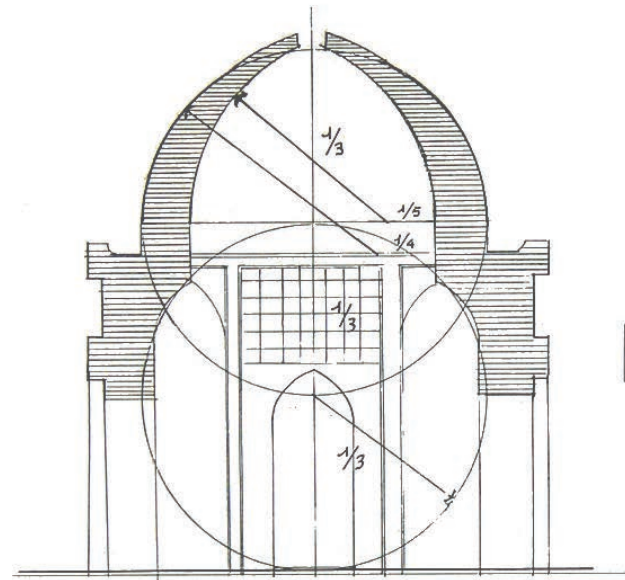
² Wellsted 1838.



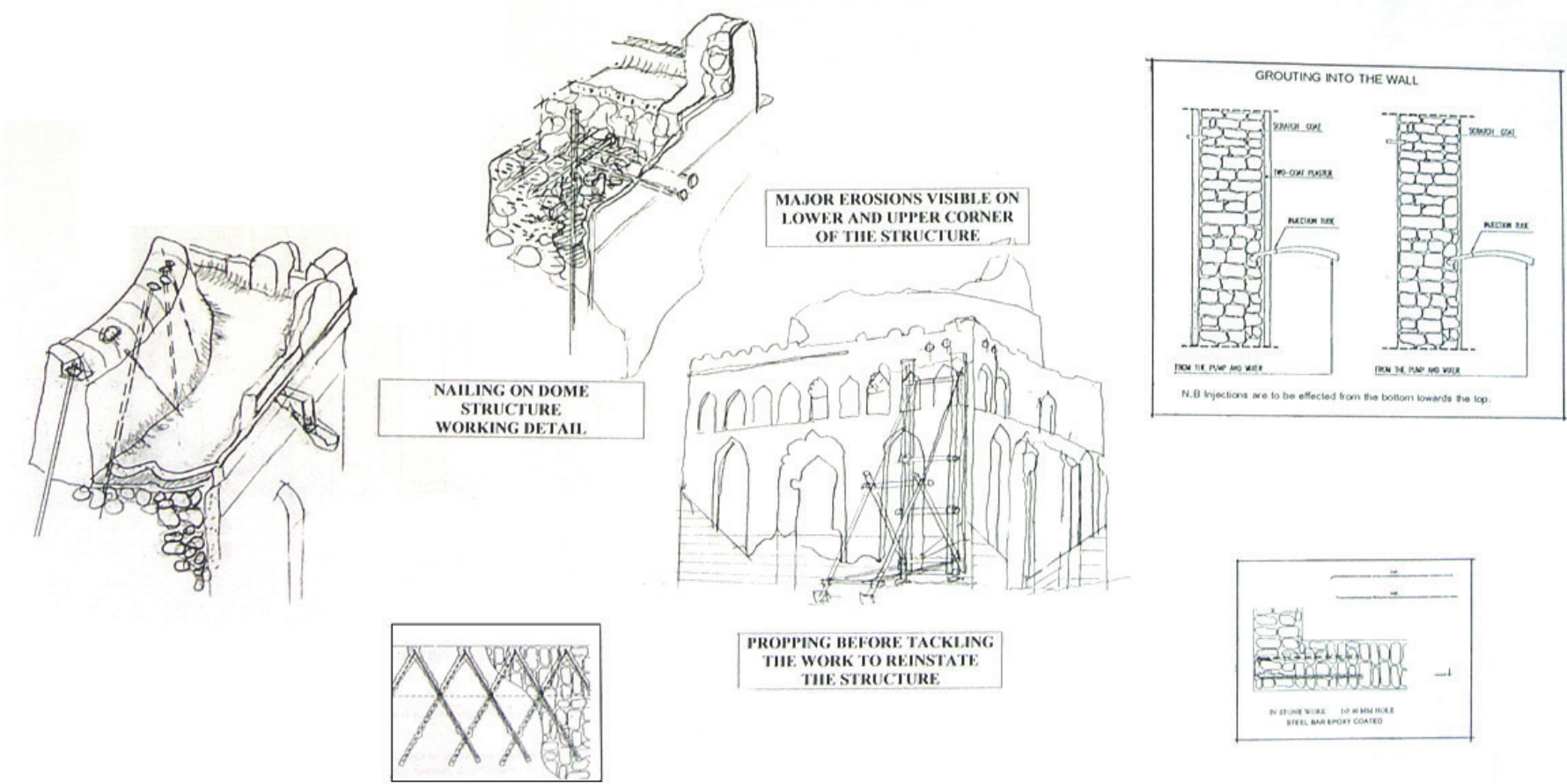
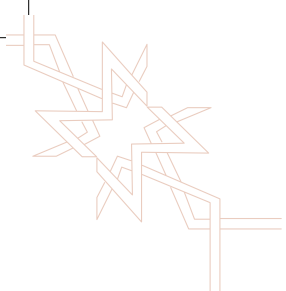
Sketches of Bibi Maryam Mausoleum © MHC, D'Errico, 2005



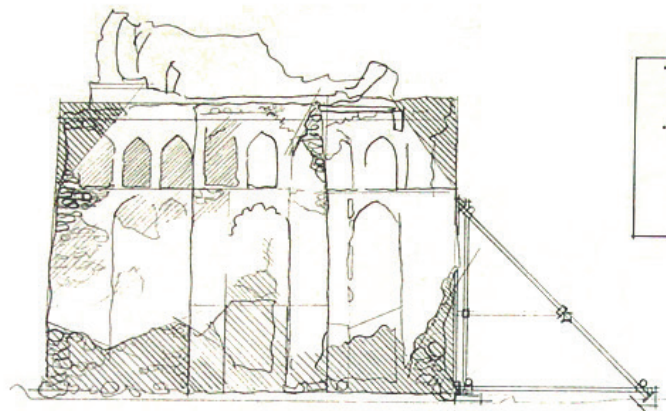
Sketches of Bibi Maryam Mausoleum © MHC, D'Errico, 2005



Sketches of Bibi Maryam Mausoleum © MHC, D'Errico, 2005

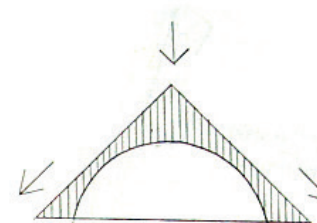


Sketches of Bibi Maryam Mausoleum © MHC, D'Errico, 2005



PROPPING BEFORE TACKLING
THE WORK TO REINSTATE
THE STRUCTURE

- Forces are usually directed along routes for the proper distribution of loads. The effect of force is rarely in equilibrium if suitable paths of distribution of loads are ignored. Any negligence in this matter could lead to considerable structural damage.
- Removing masonry could create an imbalance. The load will try to be redistributed and as a reaction, the pressure of load will be directed through a line of action. The effect of force will be as represented by the lines which can be distributed uniformly by positioning and directing the magnitude of the forces through a radial arch form which will support and redistribute the loads uniformly to avoid any collapse, damage or imbalance in the structure.

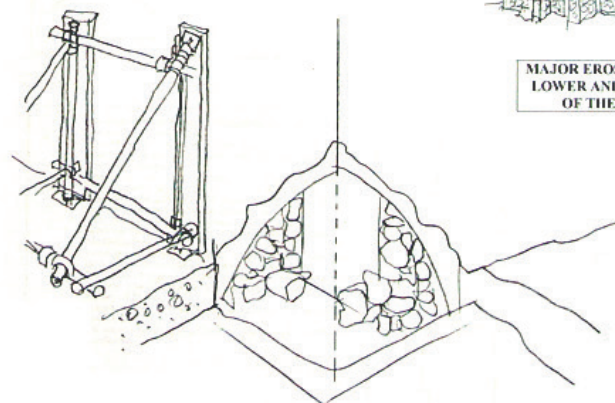


THE EFFECT OF THE FORCES CAN BE DISTRIBUTED
THROUGH A RADIAL ARCH FORM WHEN CREATING
AN OPENING IN DAMAGED STRUCTURE.

MASONRY CONSOLIDATION	
Stone work construction	
• Faced stonework shall be level, plumb, and squared, according to the in situ samples to engineer satisfaction.	
• The stone to be used for stone masonry should be of the proper shape, size, color, and quality, free from cracks, fissures, discoloration, or other defects that will effect strength durability or appearance and shall be obtained from approved sources.	
• The stone should be matching the existing adjacent, and properly dressed as per requirement, to engineer satisfaction.	
• The construction work of stone masonry should be raised uniformly and set in full bed mortar with vertical joints and void filled in, and bonded in brick masonry by overlapping alternative courses.	
• The joints shall be raked out as work proceeds.	
• No broken stones should be used.	
• The cramps when required shall be of non ferrous metal. The new stone construction shall match the existing one.	
• In order to ensure continuous bond between the old and the new the walls should be stopped with toothed end.	
• Mortar shall be mixed in small quantities and used immediately mixed as per engineer satisfaction.	
• Mortar which has begun to harden or set shall not re-mixed or used and shall be removed from the site.	
• If hand mixing is employed it shall be carried out on wooden platform.	
• Every stone shall be laid with full joints of lime mortar on its bed, ends and sides in one operation. No pointing after completion will be allowed.	



MAJOR EROSIONS VISIBLE ON
LOWER AND UPPER CORNER
OF THE STRUCTURE



WHEN A LOOSE AREA HAS TO BE REFURBISHED:
DEMOLISH THE UNSOUND PORTION OF THE WALL
BY CREATING AN ARCH TO DISTRIBUTE THE
STRESS AND PREVENT FURTHER CRACKING AND
COLLAPSE, PROPPING THE SHOULDER AND APEX.



Bibi Maryam Mausoleum after restoration © MHC, D'Errico, 2005

The cisterns

At least two cisterns were identified at the site. The first rectangular basin is located in front of Bibi Maryam, it is dug into the bedrock and the walls are made of stone blocks covered with a thick earth and gypsum plaster. It was covered by a barrel vault partially preserved that was and still is the only part of the structure visible over the ground. Nowadays, the bottom of the cistern is filled by sediments and the system of water collection is not visible any more. To avoid any risk of accident, the cistern is now surrounded by a metal fence. Its preservation was carried out by the MHC under the direction of Arch. Enrico D'Errico at the same time of the works at Bibi Maryam. The second structure is located extra-muros in the southern quarter of the city. It was built as a sort of dam following the natural morphology of the depression fault. Various small walls around canalised the rainwaters flowing down from the mountain. The reservoir is now closed on three sides by stone blocks walls arranged with an earth



The cistern in (B2) is located in the western part of the city, next to the Bibi Maryam mausoleum © MHC, 2007

mortar and partially covered by the remains of an earth and gypsum plaster that waterproofed the surfaces. The walls could reach the height of 1m above the ground, especially on the east and north sides. A hole in the east wall most probably worked as a floodgate. The bottom of the cistern is filled with at least 3m of sediments. In 2015-16, as an activity of the QDP/conservation component, the reservoir was cleaned from the vegetation and the walls were reinforced with the reinsertion of the missing blocks.

The Qalhat Development Project conservation works
Six excavated buildings were preserved between 2013 and 2016:

B67, funerary mosque	located in the northwest quarter, dug between 2008 and 2013
B19, small platform mosque	
B21, possibly a store	
B94, twin houses	still visible on the ground
B9, extra-muros reservoir (described above)	
B4, hammam and well	at the entrance of the site from Wadi Hilm; excavated in 2003

The preliminary study and assessment of the structures, and the analysis of the mortars and plasters made by a specialized lab allowed to identify the right materials to prepare the mortars. The original composition of earth and traditionally fired gypsum for mortars and plasters could not be reproduced because the expertise is lost in Oman as well as in other GCC countries and the industrial gypsums do not present the appropriate characteristics to be used in conservation works.

Mortars are produced using a red silty soil from a wadi 3 km from Qalhat, saruj and washed sand. Hydrated lime, as a compatible material, is used as binder instead of the missing traditional gypsum. The composition of the mortars and plasters varies depending on the building construction specificities. To respect the principle of using as much as

possible traditional materials, old mortars recovered from the joints curettage of each building are incorporated into the mixtures. Curettage of masonry joints is probably one of the most delicate steps but it is necessary to replace the old dry, weak and friable mortars with the new mixture which will reinforce the structure.

Only limestones and coral stones belonging to the building under treatment were used. Reconstruction interventions are minimal. The height of the walls found during the excavations is respected. Only one or two courses could be added if needed for stabilizations reasons.

The presence of plaster still in situ on the walls varies. In some buildings it is limited; in others as the hammam and the Great Mosque it is extended. In this last building, it is affected by numerous cracks. At the moment, they are consolidated with minimum interventions to avoid their collapse. A restorer who made an assessment in 2016 also suggested that closing the cracks and filling the gaps with the appropriate mixture of gypsum and earth is the most applicable technique for the situation in Qalhat.

Where the floors are irregular due to excavations or soundings, a layer of stones is prepared to level the area and to facilitate the drainage. Earth is deposited and compacted manually with a weight. Sometime, a small quantity of hydrated lime could be added to avoid a friable surface. If the original plaster floors are still in situ, geotextile is laid down and then it is covered with earth that is very carefully compacted. A thin layer of gravel is used where the excavations confirmed that it was present in the antiquity. This was recurrent in open areas. When needed, simple drainages are studied to avoid waters to stagnate near the walls and on the restored floors.

4.b.2. Other Structures

The defensive system

Important information about the city walls are delivered by written sources: Ibn al-Mujawir in his *Tarikh al-Mustabsir* who visited Qalhat around 1230, and the later Portuguese chronicle of the attack to the city in 1508. The plan derived

from surveys and soundings conducted by the French team does not exactly correspond with the historical information but confirms the date of the construction of the walls around the 13th / 14th AD century .

If the line of the walls is well visible on the ground, many sections are crumbling. Only a short section (23m) of the north-west wall was restored in 2015-2016 during the conservation works of the Qalhat Development Project. This was done to reinforce its function of retaining wall in correspondence of the hammam that underwent preservation works during the same season.

The extension of the defensive system prevents its systematic conservation/restoration but regular monitoring will be conducted to evaluate which areas could represent a threat and/or which should be prioritized for emergency conservation works to avoid further collapses.

Funerary buildings

In the funerary quarter, around a dozen mausoleums at various stages of decay were identified. Two of them, located close to Bibi Maryam on the opposite side of the track are now totally destroyed and hardly discernible on the surface. Five others are small structures ranging from 2.5m to 4.5m in dimensions, square or octagonal in shape. Two of them were restored/reconstructed by an Iranian team in 2008 while three are still standing but in a poor state of conservation.



funerary quarter © MHC, 2008

The mausoleums were built with a mixture of limestone and coral stone blocks. The walls are covered by plasters both inside and outside. The outer plasters might differ for quality and colour. One pinkish and particularly hard type is often visible on other noble buildings as Bibi Maryam and the Great Friday mosque.

Excavated buildings

Various structures, excavated recently, need now the attention of the conservators because still fragile. Some sections of the Great Friday mosque and of the kilns were reinforced by a wooden shoring as a temporary emergency measure.

4.c. Factors Affecting the Property

4.c.1. Development Pressures

The property is not pressurized by development. The construction of the highway is completed and it can be said that it has a role of boundary for the site. The village is on the other side of Wadi Hilm and it cannot extend near or in wadi (where the northern buffer zone is located) for protection of the population against floods. Few farms are present in Wadi Hilm but they use traditional agricultural techniques and are part of the traditional landscape of the area. It is improbable that they will be enlarged because of their fragile position inside or at the margin of the wadi. Oman LNG is also enough far for not affecting the property both in its boundaries or buffer zone.

4.c.2. Environmental Pressures (e.g. pollution, climate, climate change)

Climate change might affect the site if heavy rains and storm episodes will become more recurrent as in 2015/2016. Monitoring should happen in collaboration with the municipality of Sur and the Directorate General of Meteorology to set a recording system of the rainfall average in the area of the property.

Accidents at OLNG or on the highway might generate pollution. The law on Conservation of the environment and pollution prevention (Royal Decree no. 114/2001) makes

a specific reference to heritage in article 7 stating that it is not allowed to dispose pollutants that might affect the historical and cultural heritage of the Sultanate. Articles 22 to 26 are specific to marine environment and discharge or splits of oil. In case of similar accidents and in reference to the above Royal Decree, the MHC will coordinate any action of protection with the Ministry of Regional Municipalities, Environment and Water resources.

4.c.3. Natural Disasters and Risk Preparedness

The Oman coast, including the Sharqiyah area, could be affected by earthquake and tsunami because of frequent activities of the Makran plate and of the unstable sediments of the Gulf of Oman that could be affected by submarine slides generated by earthquakes³.

According to some scholars, Qalhat was damaged by an earthquake around the middle of the 14th AD century , but this assertion is never referenced⁴ and the only more or less attested cataclysm would be dated to the last quarter of the 15th AD century , possibly the same as the one which destroyed the wind-towers and minarets at Hormuz in winter 1482-83⁵.

4.c.4. Visitor/Tourism Pressures

There is no tourism pressure at present (2017) because no visitors are allowed at the site. The Sharqiyya region is in the list of the priority areas of the Oman Tourism Strategy. Qalhat is not specifically mentioned but it will most probably be an important spot that will receive attention when the plan will be adapted. A tourism development project in Ras al-Hadd and the construction of the new Maritime Museum in Sur will also increase the presence of visitors in Qalhat. An Interpretation Plan is planned in the medium term in the Site Management Plan (Phase 3 of the Qalhat Development Project) to prevent any negative pressure over the site.

3 Khatib & Alami and Partners, 2007.

4 Wilkinson, 1990.

5 Aubin 1972: 77-179; Ambraseys and Melville, 1982.

4.c.5. Number of Inhabitants within the Property and the Buffer Zone

There are no inhabitants inside the property, however, there is limited number of inhabitants in part of the buffer zone.



Bibi Maryam Mausoleum © MHC, D'Errico, 2005



Ancient City of Qalhat. Aerial view © MHC

Section 5

Protection and Management of the Property

5.a. Ownership

The site of the Ancient City of Qalhat belongs to the Ministry of Heritage and Culture in accordance with the Kroki of the site No. 6-39-015-01-308. No properties are included in the buffer zone as the whole buffer zone is mountain area and the sea-side.

5.b. Protective Designation

The Ancient City of Qalhat is one of the most important national cultural heritage sites of Oman and is therefore entitled to the best protection on a national level according to the Law on the Protection of National Heritage issued by Royal Decree No. 6/80.

5.c. Means of Implementing Protective Measures

By law, the Ministry of Heritage and Culture is responsible for the implementation of all protective measures for the property. It is organized as follows:

The administrative organization responsible for the protection and management is the Ministry of Heritage and Culture.

The management of the site is organized in this way: According to the Statute of the State (The Constitution), and the mandate approved by the Royal decree for the Ministry of Heritage and Culture, the Ministry remains as the main official body responsible for the protection, management and safeguard of this site.

The Directorate General of Archaeology as a part of the

Ministry's Administrative structure looks after the day to day management of the site through the mandate of its four main departments and support of other departments:

- Department of Archaeological Excavations & Studies.
- Department of Restorations & Maintenance.
- Department of World Heritage Sites
- Department of Underwater Archaeology

In the larger context of the de-centralization structure of the administrative structure of the Ministry, its regional office in the South Al-Sharqiyya, close to the site, involved as well in monitoring all activities on the site.

5.d. Existing Plans Related to Municipality and Region in Which the Proposed Property is Located.

As the site is owned by the Ministry of Heritage and Culture, any future plans to be decided for the new facilities on the site, for example the design of a visitor center, should be approved by the local Municipality.

5.e. Property Management Plan or Other Management System

A Final Draft Management Plan for the Ancient City of Qalhat was completed in 2017. The Executive Summary is included in this nomination file. The protective measures and the management mechanisms for the Ancient City of Qalhat have been clearly identified.

Previously to this date, there was not a properly management system other than the protection measures taken

under the responsibility of the Ministry of Heritage and Culture in accordance with the Law on the Protection of National Heritage issued by Royal Decree No. 6/80.

The management planning process was value-based and divided into three phases: documentation, assessment, and response. The methodology adopted for the compilation and implementation of the plan is briefly presented here.

Documentation phase

Data were gathered from various sources and consist of:

- major published and unpublished material on the history, archaeology, and conservation of the site
- any other regional or national plans that may affect the conservation and development of the areas where the site is located
- national laws which can concern cultural heritage
- identification of stakeholders and steering committee
- detailed plans at various details and scales

Assessment phase

Three major assessments were produced:

- assessment of the physical condition of the site
- assessment of the stakeholder groups and the values they held towards the site
- assessment of the administrative conditions of the site

Condition assessments provides information on the state of conservation and causes of deterioration of the site's features. This information together with the conservation actions implemented at the site are used to establish con-

conservation measures in line with the urgency and importance of the affected site elements.

A wide representation of stakeholders has been consulted in order to identify the different values characterizing the site. Consultation was a tool for true participation of different interest groups, especially among the local authorities and communities. Local community and stakeholders' participation will continuously ensure that a common vision is reached for the conservation and development of the site and nearby communities.

Assessment of the administrative conditions of the site includes an analysis of legislative frameworks and regulations having an effect on the conservation and public use of the site. This analysis was used to introduce proposals to correct the current administrative and legal frameworks present at the site.

Response phase

During this phase the results of the assessments were used to produce sensible policies concerning the conservation, presentation, development, and management of the site. Policies are accompanied by strategic axes and actions that identify the practical way of implementing the plan. The plan expresses policies for short, medium, and long-term implementation.

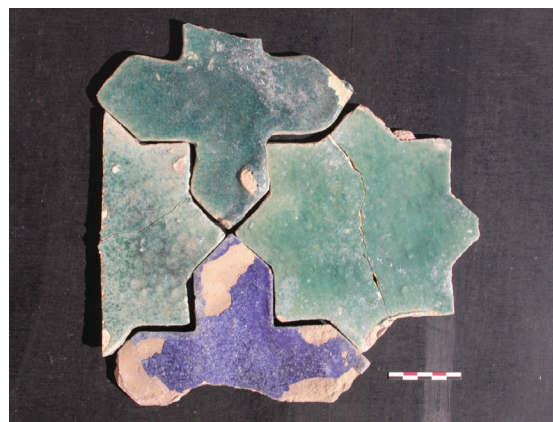
The following section presents in more practical details some aspects of the production of this management plan and of the procedures and actions that should be expected.

Structure of the plan

- The plan has the following sections:
- The first section summarizing the information available from data collection
- The second section containing the assessments, a statement of significance and the main issues that the plan has to solve
- The third section with the suggested policies of the plan and the actions that will ensure their achievement, over the short (less than 2 years), medium (five years) and long term (more than five years), and the implementation pro-

cedures

- Appendices or totally separate reports to cover the detailed studies, deriving from the conservation works, the stakeholder analysis, and the administrative context.
- Finally, the plan provides recommendations and specific actions to address the following elements at the site:
- Legal and institutional framework
- Appropriate use of the site
- Professional capacity building
- Research and Excavations
- Conservation and documentation
- Maintenance, monitoring and key indicators
- Interpretation and presentation
- Tourism, facilities, services and infrastructures
- Public awareness and education
- Community participation and economic development opportunities
- Investments, marketing and funding



Cross and star decoration in the Great Mosque © MHC, 2013

5.e.1. Executive Summary of the Final Draft

Management Plan

Location: The archaeological site of Qalhat is located on the coast of the South Sharqiyya province, about 50km to the northwest of the easternmost tip of the Arabian Peninsula, at the mouth of the Gulf of Oman. It stands on the south bank of Wadi Hilm, 20km from the city of Sur, 5km from the Oman LNG Qalhat plant. South of Wadi Hilm is a triangular rocky plateau more than 60ha wide (about 1km large along the wadi and 1.5km long southwards), which is sloping from the foot of the Jebel Al-Hajr Al-Sharqi, at c.40m above sea-level, to the shore where it ends with a steep cliff about 12m high. The Medieval city is located on the north part of this plateau near the wadi. It covers a triangular area about 900m on each side (c.35ha), opened onto the sea on its eastern side, which is lined on the northwest side by a fortification wall built on the edge of the wadi, and on its southwest side by another wall running across the plateau from the mountain to the cliff.

History: As claims of pre- or Early Islamic foundations of the city are unproven, historic and archaeological records place the foundation of the city towards the end of the 5th/11th century. The fame of Qalhat started in the 7th/13th century, following the decline of the previous Omani emporium of Sohar and the rise of the Hormuzi kingdom. A fortification wall was built and the city became the major port of Oman, trading especially with India. The city was administered by governors issued from the aristocracy of Hormuz. Mahmud al-Qalhati, Baha al-Din Ayaz and Bibi Maryam are the most renowned historical characters of Qalhat and none of the further governors of the city is known by name, even the one who sheltered Ibn Battuta in 732/1331, shortly after Bibi Maryam's reign. In 728/1327, the merchant dynasty of Qays ended, leading to the final unchallenged supremacy of Hormuz on the Gulf maritime routes. Qalhat kept its status of second capital of the kingdom until the arrival of the Portuguese. The decline of the city during the 15th century might be due to a number of factors, from the emergence of Muscat as the main port of

Oman to an earthquake that may be dated to 1482 or 1483. It was still a finely built city by the time the Portuguese arrived at the beginning of the 16th century, sacking the city in 1508. By the end of the 16th century the city was completely abandoned and in ruins.

Archaeology: the central quarter is densely built and contains about a hundred buildings including the Friday mosque near the beach and another large complex, perhaps a madrasa. The northeast quarter, near the harbor, contains some of the largest buildings of the site, which could have been residences and/or warehouses connected with the maritime trade. One of these buildings might have been the palace of the governor of Qalhat. The northwest quarter is more sparsely built but contains important buildings such as a typical platform mosque, a storehouse, and houses that seem to have had industrial functions. The west quarter of the city seems to have been mostly an artisan district, as the presence of workshops shows, one of which probably was a jeweler's workshop. The south quarter, overlooking the beach, has not been excavated. It includes the southern ramparts and its fortified gate. A large funerary area is found to the western side of the site, both inside and outside the fortification walls. The documentation of the area has identified about 2200 funerary structures, but also cisterns and a well-preserved hammam overlooking Wadi Hilm. The most prominent feature of the funerary quarter was the mausoleum of Bibi Maryam, the only edifice which is still standing at Qalhat. The mausoleum stands now isolated, a Seljuk's style monument with a square base c.8 x 8m crowned by a cupola on a drum, but it was clearly part of a large complex now nearly totally destroyed. It was in its heydays highly decorated but nothing is left now of this decoration except for traces of a mosaic of plain blue glazed tiles in the shape of stars and crosses on the jamb of the southern entrance. Outside of the city walls there are, north of the city, near the beach, traces of a suburb including a cemetery, and several lookout posts are found on a ridge on the north bank of Wadi Hilm, near the modern village.

Research, conservation, documentation: Archaeological investigations on site only started in 2003 with an Omani-Australian project directed by T. Vosmer. The main result of this project was the identification of a number of anchors in front of the Qalhat coast and of the hammam near the North gate of the city. This was followed in 2008 by an Omani-French project directed by A. Rougeulle who excavated a number of structures including the Friday mosque. Since 2013 the project continues with the French team both as excavation and conservation, with the participation of World Monuments Fund managing the conservation component. The first conservation interventions were conducted in 2005-2006 on Bibi Maryam mausoleum and a nearby cistern by the MHC. In 2008, two small mausoleums were reconstructed by an Iranian team. More comprehensive work addressing several of the buildings excavated by the French team is taking place since 2013 under WMF's supervision and according to a strict methodology. Documentation is being systematically conducted in parallel with research and conservation activities, having resulted in a comprehensive GIS and inventory of the structures visible on the surface, which were also recorded using digital photogrammetry.

State of conservation and threats: Mortar decay has caused walls to become unstable and collapse, together with other phenomena such as erosion, vegetation growth, heavy rain. The construction of a highway just to the west of the site may have increased water flow towards the site, increasing the risk of floods. Natural threats include coastal erosion and cyclones. Man-made threats are reduced given the natural barrier offered by Wadi Hilm, which does not allow the village to expand towards the site. The Oman LNG plant few kilometers to the south has a certain visual impact but is well beyond the limits of the site.

Management context: The Heritage law 6/80 is the current royal decree for the protection of the archaeological sites of Oman including Qalhat (See Annex 1&2). A new law is under revision. Various other laws and regulations apply, increasing the protection of the site, which is also

proposed for inscription on the World Heritage List. The competent authority with jurisdiction over the site is the Ministry of Heritage and Culture. Before the preparation of this site management plan, there was not a systematic management structure for Qalhat. Key stakeholders from the government, civil society, and private sector provided information and input throughout the preparation of the plan. Financial resources for the development of the site are being provided by the Omani government.

Values: Historical and archaeological values are the prevalent ones at Qalhat, given its position as second capital of the Hormuz kingdom and as the most important port city in Oman between the 11th and the 15th century, but also because of the importance of its archaeological remains. The site however also enjoys high aesthetic, artistic, architectural, landscape and social values. The site also has the potential to become a tourist attraction, contributing to the economic development of the Sur area.

Site Management Plan – Vision: Qalhat is a site that deserves attention with a protection and development program of excavation, conservation, management and interpretation. For its integrity and authenticity it deserves international recognition through its inscription on the World Heritage List.

Its archaeological features will be preserved, interpreted and presented to the public avoiding large scale interventions. The setting of the site will be protected by coordinating with relevant authorities and stakeholders any future activity in the area and by limiting the expansion of nearby infrastructures. Research will be encouraged and economic opportunities linked to increased visitation will be created for the local community.

Site Management Plan – Aims, policies and actions: The Qalhat Site Management Plan (SMP) addresses the following management targets:

- Legal and institutional framework
- Appropriate use of the site
- Professional capacity building
- Research and excavations

- Conservation and documentation
- Maintenance, monitoring and key indicators
- Interpretation and presentation
- Tourism, facilities, services and infrastructures
- Public awareness and education
- Community participation and economic development opportunities
- Investments, marketing, and funding

Each target is articulated with a main aim, which is achieved through the establishment of policies and the implementation of actions in their support.

SMP - Legal and institutional framework: The aim is to guarantee the conservation of the site's values and of its authenticity and integrity, through coordinated management and the enforcement of protection by-laws. Policies and actions include clear definition of boundaries and buffer zones, Ministry of Heritage and Culture's role in providing enhanced protection and sustainable site management (through the implementation of a Site Annual Plan, in coordination with various Directorates, the Municipality of Sur, and the Governorate, and integrating the plan in local, regional, and national development plans).

SMP – Appropriate use: The aim is to ensure that future uses of the site do not modify its original configuration and setting, or its integrity. This is achieved through the development of guidelines for the sustainable use of the site.

SMP – Professional capacity building: The site will need a permanent, dedicated staff to cover all aspect of comprehensive management. Capacity building will ensure that each position in the team is properly assigned and that only trained personnel is integrated in the staff structure.

SMP – Research and Excavations: Research in Qalhat will be promoted in order to reinforce and further enhance the values of the site. Investigations will be undertaken as per the highest international standards and will ensure that their outcomes are accessible to the international community and the larger public. A research strategy will be

developed and further excavations will be conducted with the highest standards. A Documentation Center will archive all data related to the archaeology of the site.

SMP – Conservation and Documentation: Site conservation will endeavour counteracting man-made and natural threats and will ensure the long-term sustainability and minimum impact of interventions, as per highest international standards. Accurate and accessible documentation on interventions will ensure transparency of conservation actions and their continuous revision in the light of new technical discoveries and acquisitions. This will be achieved through the implementation of a conservation strategy establishing intervention priorities and will respect principles of reversibility and minimal impact; conservation will be executed by experts in the field. Every intervention will be thoroughly documented.

SMP – Maintenance, Monitoring and Key Indicators: Regular site monitoring and maintenance will ensure that the values of the site, its authenticity and its integrity remain intact and are properly conveyed to all stakeholders. Tourism flows will also be closely monitored to reduce its impact on the site. Maintenance and monitoring protocols will be developed and implemented.

SMP – Implementation and Presentation: Qalhat will be interpreted and presented to foster the understanding of its cultural values. Communication strategies will be designed to meet visitors' needs and expectations, and will endeavour to minimize visitation's impact on site conservation. The MHC will ensure highest interpretation and presentation standards, and projects will be developed according to emerging needs and following a strategy to be developed in parallel with further research and improved understanding of the values of the site.

SMP - Tourism, facilities, services and infrastructures: A visitor center facility will be developed to a high standard. Paths will be designed and implemented. Site develop-

ment will not conflict with site conservation, and it will be subordinated to the preservation and enhancement of the site's values, authenticity and integrity. Every development project will be assessed for its potential impact, and their implementation will respect the original environment and will not affect the aesthetic and landscape values of the site.

SMP – Public awareness and education: Education and public awareness will be a core element of site management and presentation and will equally target adults and the youth, but they will particularly endeavour to engage the latter through the establishment of official heritage education and field-based opportunities, in order to facilitate the dissemination and promotion of heritage-friendly behaviors and a culture of heritage preservation.

SMP - Community participation and economic development opportunities: The participation of the local community will be encouraged in the fields of education and awareness, direct involvement in the presentation of the site, and in the development of culture and tourism-based economic opportunities. This will be achieved encouraging private enterprise, involving community in the presentation of the site, and establishing outreach programs with children and youths.

SMP – Investments, marketing and funding: MHC will provide funds for the operating costs of the site. Extra-budgetary funds could be ensured through ad-hoc fundraising activities to promote site conservation, investigation and presentation. Community-based activities aiming at tourism development in Qalhat and in the surrounding region will be supported to enhance heritage-driven development in the area and to reinforce community participation into site conservation and presentation.

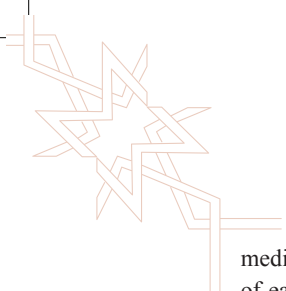
An implementation schedule is also developed, establishing priorities and responsibilities. The plan has a 5-6 years' horizon, although some of its recommendations are of a continuous nature. A table presents the timeframe (short,



Ancient City of Qalhat. Julfar cooking pot © MHC, 2013



Ancient City of Qalhat. Chinese white porcelain bowls © MHC, 2013



medium and long) and the priority (high, medium, low) of each suggested action. A review of the plan is recommended after two years from its implementation, in order to verify progress and adjust targets.

5.f. Sources and Levels of Finance

The financing of the archaeological excavations, surveys, conservation projects in the Ancient City of Qalhat is included in the general State budget. These allocations are included in the five-year plans of the Ministry of Heritage and Culture. The budget covers urgent measures in case of environmental pressure or natural disasters as well as general management of the site. Financing of the Final Draft Management Plan that is prepared by WMF is fully funded by the state money.

The French government participated partially in the financing of some excavation activities, either ensuring the salary of the lead archaeologist (CNRS). Some of the archaeological works are also supported by the Archaeological Committee of the French Ministry of Foreign Affairs.

5.g. Sources of Expertise and Training in Conservation and Management Techniques

Comprehensive and systemic training in protection and management of cultural heritage is only partially covered by higher education programmes. The Ministry of Heritage and Culture employs experts from Oman and abroad in the fields of archaeology, conservation and heritage management. They are subject to continuous training.

The responsible staff of the Ministry of Heritage and Culture participate in joint actions in the field of archeology of the Gulf Cooperation Council. Training in management, conservation and restoration is also partially covered by ICCROM through its regional center in the UAE. Foreign institutions like the French National Center for Scientific Research (CNRS) and Eveha (French Company for Surveys and Excavations) function as experts for surveys and excavations and the Monuments Fund (WMF) gives expertise for conservation works as well as for heritage

management.

The Ministry of Heritage and Culture conducts annually a number of training workshops by inviting experts in different subjects on heritage management and conservation. Participants in these training initiatives are from the head office of the Ministry as well from the regional offices.

5.h. Visitors Facilities and Infrastructure

Currently the site of the Ancient City of Qalhat is closed to the public and has no visitor facilities or infrastructures such as parking spaces or toilets. Only two monuments are protected by barriers (the Bibi Maryam mausoleum and the neighboring water cistern). Even if the site is visible from the highway and it is mentioned with a panel, the road to the site is not marked.

The nearest city with all facilities for visitors, such as hotels and restaurants, is Sur, located at 30 km from the site. A tourism development plan for the site is included in the Qalhat Development Project, which started in October 2013 and will end in 2018. A visitors center, adjacent to the Ancient City of Qalhat, with enough room for meetings, seminars, conferences, workshops and exhibitions is included in the initial plan, as well as enough parking spaces for future visitors. The entrance to the site will then be controlled for a better protection and reduce visitor pressing.

The Ministry could consider in near future, subject to apply careful measure, guided and organized visits to some parts of the site to allow the local population seeing what is being done on the site.

5.i. Policies and Programs Related to the Presentation and Promotion of the Property

The only program related to the presentation and promotion of the Ancient City of Qalhat is the Qalhat Development Project. The Final Draft Management plan will certainly address the real needs for programs and policies to preserve the OUV's of the site especially those related to the cooperation with the Ministry of Tourism to promote policies and programs dedicated for the presentation and

promotion of the Ancient City of Qalhat; the inclusion of the property among the policies and programs dedicated for the presentation and promotion of the Omani World Heritage sites; the organization of seminars, workshops and exhibitions dealing with historical and cultural contexts of the Ancient City of Qalhat in particular with the Arab Regional Centre for World Heritage and the UNESCO; creation of a communication concept for the site (including a website, magazines and a national media campaign; promotion of the site in cultural and touristic festivals and events organized locally, regionally and internationally and free actions for visitors); the development of a permanent exhibition on the history of Qalhat in the future visitor's center; preparation of programs of student visits throughout the school year in collaboration with the Ministry of Education, enhancement of these visits by holding lectures, workshops, theatrical performances and cultural competitions.

5.j. Staffing Levels and Expertise

Currently five personnel from the Ministry of Heritage and Culture are involved with different works on the site of the Ancient City of Qalhat. Two of them are responsible for surveys, rescue excavations, restoration of buildings and supervision. Three others work as site keepers.

The Ministry of Heritage and Culture has also a number of personnel eligible to contribute in the restoration project and exploitation of the Ancient City of Qalhat in the future. This staff, mainly historians, architects and archaeologists, is qualified for developing all kinds of programs and projects aimed at protection, development of documentation, archaeological research and development of presentation programs.

Foreign institutions like the French National Center for Scientific Research (CNRS) and Eveha (French Company for Surveys and Excavations) function undertake surveys and excavations and the World Monuments Fund (WMF) gives expertise for conservation works as well as for heritage management.



Bibi Maryam Mausoleum © MHC, D'Errico, 2005



View of the remains of the northern courtyard of House B94 (16th AD century) © MHC

Section 6

Monitoring

6.a. Key Indicators for Measuring State of Conservation Monitoring

The site final draft management plan incorporates specific actions and a protocol for monitoring and periodic review based on preliminary indicators. Future additions will be identified and evaluated if necessary on the basis of the results of the assessments.

The GIS documenting the entire ancient city of Qalhat prepared by the French team of the Qalhat Project working at the site since 2008, the photogrammetry executed by Iconem for the Qalhat Development Project, and the rich photographic and graphic archive will be the base instruments for the execution of the monitoring protocol. Data will be entered in forms and electronically filed. Records will be kept in the Documentation Center at the Sur office and in the Ministry of Heritage and Culture archives. If damage is assessed, it will be addressed based on their nature and character and following table shows the conservation guidelines.

Key Indicators on State of Conservation	Recording	Structures	Monitoring periodicity
State of conservation of walls, original plasters, and floors	Use of previous documentation for assessing damages, modifications to the buildings, and threats. Updated records will be produced.	Excavated and preserved buildings & Excavated buildings	Twice a year and/or after important storm events
Assessment of the existence of humidity around and inside the buildings	Use of previous documentation. Updated records will be produced.	Excavated and preserved buildings & Excavated buildings	Twice a year especially after important storm events
State of conservation of the unexcavated monumental structures	Use of previous documentation. Updated records will be produced.	(i.e.: city walls)	Once a year or after major natural events (particularly strong storms, earthquakes)
Assessment of damages caused by heavy rains	Previous reports are consulted and updated reports are produced.	Excavated and preserved buildings & Excavated buildings	After the storm events
Assessment of damages caused by tourists	Previous reports and documents are consulted and updated reports are produced.	Excavated and preserved buildings & Excavated buildings	Regularly (after the site open to the public), based on visitors' number
Assessment of damages caused by animals	Previous reports and documents are consulted and updated reports are produced	Excavated and preserved buildings & Excavated buildings	Regularly, twice a month or more
Assessment of damages caused by high tides	Previous reports and documents are consulted and updated reports are produced.	Coastal part of the site	Yearly or after particularly high tides
Environmental records based on common parameters (humidity, average rainfall, winds, temperature)	Previous reports and documents are consulted and updated reports are produced.	All site	Seasonally, in collaboration with the competent authorities (i.e.: the Directorate General of Meteorology)

6.b. Administrative Arrangements for Monitoring Property

The Ministry of Heritage and Culture is responsible for the protection and management of the site. According to the plan, monitoring responsibilities will be given to the local Ministry of Heritage and Culture office in Sur through the Site Manager and to the Qalhat Management Team.

6.c. Results of Previous Reporting Exercises

No previous systematic reporting has been conducted, although since 2013 the Qalhat Development Project/Conservation Component has conducted:

- a general assessment of the site conditions prior to its implementation;
- the monitoring of the preserved structures and of the excavated buildings at the beginning of each conservation season;
- the assessment of the archaeological buildings (preserved and excavated) during the presence at the site of the conservation team especially after storm events.

All this information is collected in the Middle and Final Project reports provided to the Ministry of Heritage and Culture during each working season.





General view of the room B255-B © MHC



Qalhat Site. Ceramic and pottery fragments from different origins © MHC

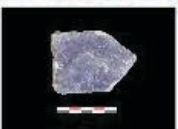
Section 7

Documentation

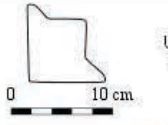
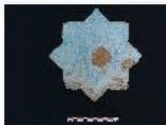
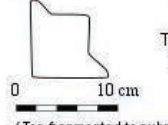
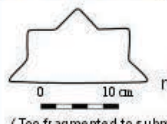
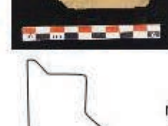
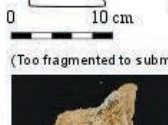
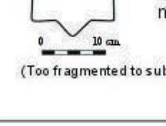
7.a. Photographs and Audio-visual Image, Inventory, and Authorization Form

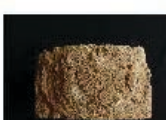
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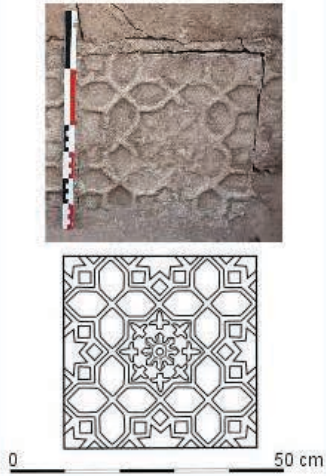
Elements / Glazed tiles

Complete Crosses	Crosses quarter
 Complete undetermined cross (Too fragmented to submit a photo)	 Undetermined, green, cobalt blue or turquoise blue cross quarter (Too fragmented to submit a photo)
Half Crosses	Fragments of tiles
 Complete green cross  Complete cobalt blue cross  Complete turquoise blue cross	 Undetermined fragment  Fragment of an undetermined cross  Undetermined green fragment  Fragment of a green cross  Undetermined turquoise blue fragment  Fragment of a cobalt blue cross  Fragment of an undetermined star  Fragment of a turquoise blue cross  Fragment of a green star  Fragment of a fritware bowl with dark lustre design  Fragment of a turquoise blue star  Fragment of blue and white



Elements / Glazed tiles		
Complete Stars	Half stars	Stars quarter
 Complete undetermined star	 Half undetermined star	 Undetermined star quarter
 Complete green star	 Half green star	 Green star quarter
 Complete turquoise blue star	 Half turquoise star	 Turquoise blue star quarter
 Complete undetermined metallic lustre star	 Half undetermined metallic lustre star	 Undetermined metallic lustre star quarter
 Complete gold type metallic lustre star	 Half gold type metallic lustre star	 Gold type metallic lustre star quarter
 Complete gold type with blue border metallic lustre star	 Half gold type with blue border metallic lustre star	 Gold type with blue border metallic lustre star quarter
 Complete gold type with blue border metallic lustre star		
Rectangular tiles		
 Fragment of a moulded turquoise tile	 Fragment of a Lajvardina tile	
 Fragment of a metallic lustre tile in slight relief	 Rectangular gold type metallic lustre tile	

Elements / Stones	
EICH	Quatrefoil stones
 EICH	 Quatrefoil
 1/2 horizontal EICH	 1/2 Quatrefoil
 1/2 vertical EICH	 1/4 Quatrefoil
 Fragment of EICH	 Fragment of quatrefoil
Quadrangular stones	
 Curved EICH	 Carved rectangular
 1/2 curved horizontal EICH	 Curved carved rectangular
 1/2 curved vertical EICH	 Carved square
	 Curved carved square

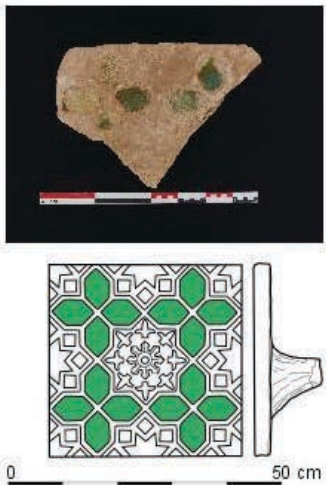
Elements / Mortar		
EM 1		Square mortar panel, composed of crosses and a central star, decorated with trefoil shaped florets. The panel can be re-carved. This type of panel is often very deteriorated, so that the stylized moldings have more or less disappeared.
EM 2		Restitution under study Mortar panel with a geometric setting, composing a geometric pattern. Cf. EC 3
EM 3		Claustra Mortar element forming a vegetal decoration.
EM 4		Full restitution under study Mortar frieze with a geometric setting picturing circles interlaced..

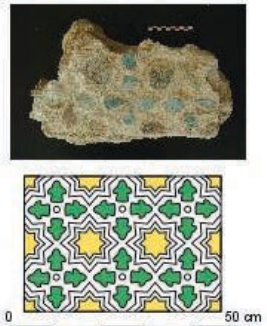
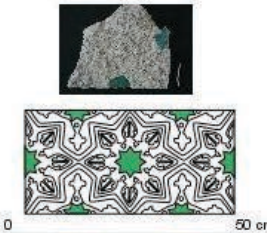
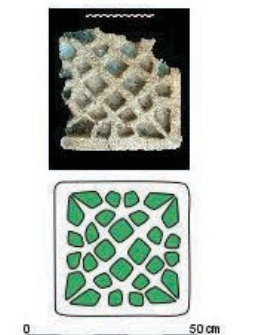
Elements / Mortar		
EM 5		Full restitution under study Mortar panel with a geometric setting, organized around a central star.
EM 6		Mortar element, quadrangular Kufi representing Muhammad name, surrounded by vegetal decoration.
EM 7		Mortar panel with a linear classical inscription.
EM 8		Restitution under study Mortar panel with a floret decoration.



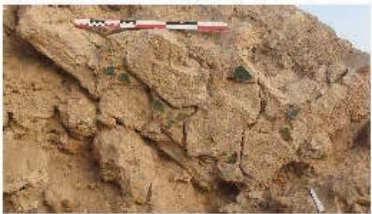
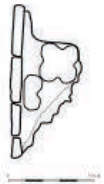
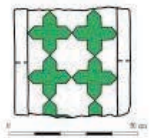
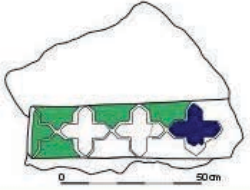
Elements / Mortar		
EM 9		Restitution under study Mortar panel, Mihrab decoration, second state.
EM 10	  	Full restitution under study Mortar molds for EC3 or EC4 decorations.
EM 11	  	Moldings applied to wall panels, forming frames door, and horizontal bands with frieze of triangles.
EM 12	  	Mortar molded panel with stylized crosses and stars, with florets and palm leaves decorations. This type of panel is often very deteriorated, so that the stylized moldings have more or less disappeared.

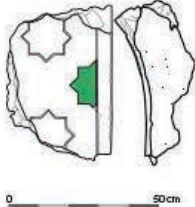
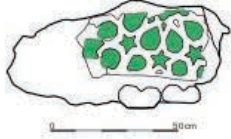
Elements / Mortar		
EM 13		Restitution under study Mortar element, Muqarnas.
EM 14		Mortar molds for EC5 or EC6 decorations.

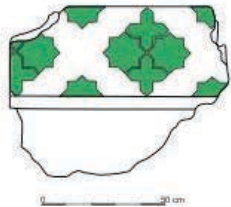
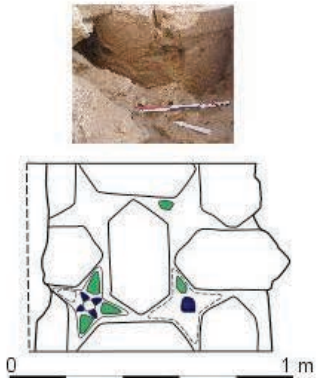
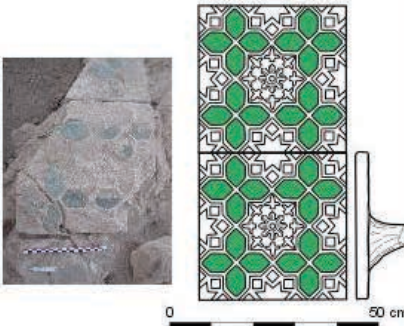
Elements / Composites		
EC 1		Mortar square panel with fragments of green glazed tiles, turquoise and/or cobalt blue, forming a cross. Crosses up a central star, decorated with trefoil shaped florets. The panel can be re-carved, often by half. This type of panel is often very deteriorated, so that the stylized moldings have more or less disappeared.
EC 2		Four-pointed star in mortar, inlaid with fragments of glazed tiles, in green, cobalt and turquoise blue colors. The stars are finally molded, the molding often being damaged. Two types of stars have been defined.
EC 3		Restitution under study Mortar panel consisting of fragments of green glazed tiles molded, forming a common geometric pattern. Applied molding appears to be random, so that the decoration is not always the same, but the overall organization remains the same. The panels vary in shape and can be carved.
EC 4		Restitution under study Mortar panel consisting of fragments of green glazed tiles molded, forming a geometric pattern. The molding is thicker than EC 3 and the shape of the stars is different too. The overall pattern can't be restituted at this time though.

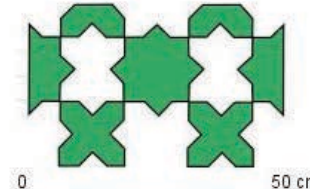
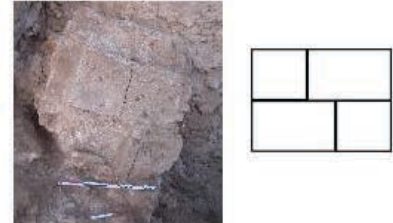
Elements / Composites		
EC 5		Mortar panel with molded crosses patterns in the shape of trefoil florets, with a center of blue fritware fragment. Crosses are interposed with metallic luster tiles forming stars. This type of panel is often very deteriorated, so that the stylized moldings have more or less disappeared.
EC 6		Molded mortar panel inlaid with fragments of green glazed tiles forming crosses, interposed with stars made from fragments of metallic luster tiles. This type of panel is often very deteriorated, so that the stylized moldings have more or less disappeared.
EC 7		Mortar panel with molded decoration forming stylized crosses and stars, decorated with palm leaves and florets, with a central green glazed tile fragment. This type of panel is often very deteriorated, so that the stylized moldings have more or less disappeared.
EC 8		Mortar panel, inlaid of fragments of green glazed tiles, forming a geometric pattern. The molding is thick, and the pattern can have been directly carved in the mortar. The panel is likely square.



Styles		
Style A	 	EICH + EC 2 Horizontal and vertical alignment of EICH, forming locations to receive EC 2. Architectural element borders are composed of horizontal half EICH.
Style B	 	Quatrefoils and half-quatrefoils arranged to form half-stars and complete eight-pointed stars. Slabs are used as borders.
Style C		Complete green glazed crosses arranged to form half-stars and complete eight-pointed stars. Architectural element borders comprise half-quatrefoils which only slice can be seen.
Style D	 	Complete crosses and half-stars in green or cobalt glazed tiles, which contours are molded. The whole forms a frieze with a likely color scheme consisting in a green cross then a blue cross, and so on. This decoration style also declines as panels with a central eight pointed star, surrounded by half crosses.

Styles		
Style E		Decoration with half-stars arranged on a border, and complete green glazed eight-pointed stars.
Style F		Setting is the same as in style C, except that here, half quatrefoils are clearly visible, forming the edge.
Style G	 	Decoration is made of EC 3 panel and half-quatrefoils forming the edge.
Style H	 	Decoration composed of blue and white ceramic fragments inlaid in coating, in order to form a cross pattern. The whole element is likely molded in finish.

Styles		
Style I		Inlaid of eight-pointed green glazed stars and crosses tiles, and half-stars on the edge.
Style J		The decoration pattern is the same as style A, but here EICHS are curved and dimensions of the architectural element are reduced.
Style K		Layout of EC 1 panels.
Style L		Layout of EM 1 panels.

Styles		
Style M		Restitution under study Layout of metallic lustre tiles and a frieze composed of half-stars, crosses fragments and rectangular tiles.
Style N		Eight-pointed stars and crosses inlaid in an architectural element. Probable half-stars or half-crosses on the edge. The general organization of decoration being restored here, the covered surface remains uncertain though.
Style O		Layout of quadrangular carved stones.
Style P		Layout of quadrangular curved carved stones.
Style Q		Frieze of glazed stars inlaid in mortar.



Ancient City of Qalhat. Inscribed tombstone from the Southwest graveyard © MHC, 2012

7.b. Texts Relating to Protective Designation, Copies of Property Management Plans or Documented Management Systems and Extracts of Other Plans Relevant to the Property.

The Ancient City of Qalhat is among the most important and protected national cultural heritage sites according to the Protection of National Heritage Act promulgated by the Royal Decree No. 6/80.

7.c. Form and Records or Inventory of Property

The Kroki of the Ancient City of Qalhat. is No. (6-39-015-01-308) and the latest records on the work done on the property correspond to the reports of the Qalhat Development Project belongs to the Ministry of Heritage and Culture.

7.d. Address Where Inventory, Records and Archives are Held

Ministry of Heritage and Culture
Al Wizarat Street, Al Khuwair North
PO. Box: 668, Muscat, PC100
Sultanate of Oman
Phone: + 968 24641357 / +968 24641442
Fax: + 968 24641359
E-mail: hassan.lawati@mhc.gov.om
Website: www.mhc.gov.om

Sultanate of Oman
Ministry of Housing

D. G. Of Housing
South Sharqiya Region
Planning & Survey Department



سلطنة عمان
وزارة الإسكان
المديرية العامة للإسكان
محافظة جنوب الشرقية
دائرة التخطيط والمساحة

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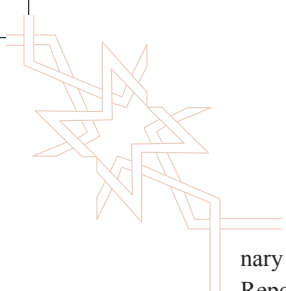
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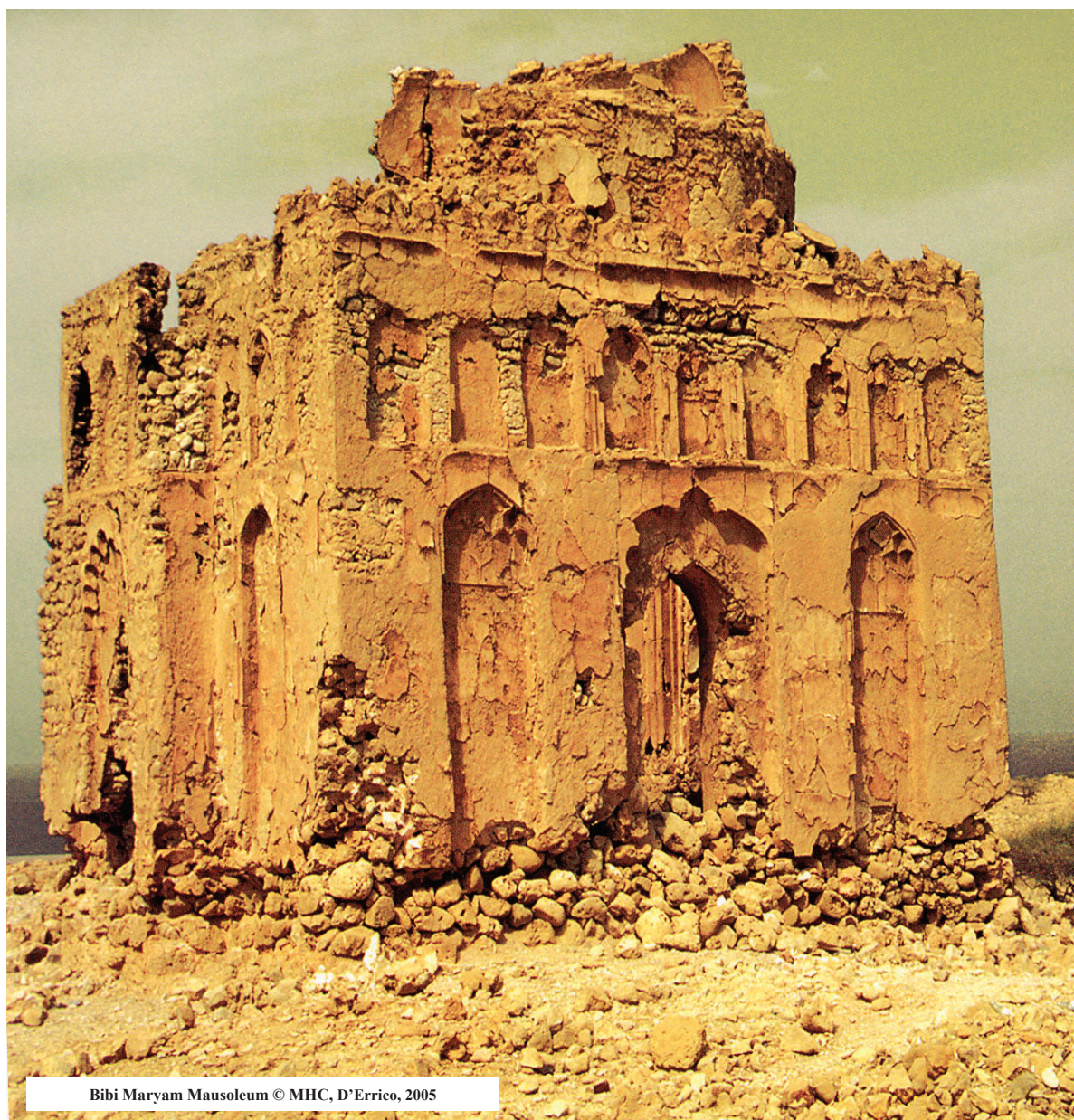


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National Survey Authority

World Monument Fund

CNRS - Centre national de la recherche scientifique

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